

Health Care

**Health  
Conditions**

Mortality

## HC 2.1 Healthy Births

A healthy birth is defined here as a birth with the following characteristics: weight at birth of at least 2,500 grams (5 lbs. 8oz.), a gestational age of at least 37 weeks, maternal receipt of prenatal care within the first trimester, and a 5-minute Apgar score of 7 or more out of 10.<sup>1</sup>

Table HC 2.1.A reports the percentage of all births qualifying as healthy births in 2001, by race and Hispanic origin. Black, non-Hispanic newborns scored lower than White, non-Hispanic and Hispanic newborns in all four measures of healthiness: gestational age, birth-weight, Apgar score, and prenatal care. For example, 86.9 percent of Black, non-Hispanic infants were born weighing 2,500 grams or more, while the comparable numbers for Hispanic and White, non-Hispanic newborns were 93.5 and 93.2 percent, respectively. Both Black, non-Hispanic and Hispanic newborns scored lower (74.5 and 75.7 percent, respectively) than White, non-Hispanic newborns (88.5 percent) in prenatal care.

**Differences by Period of Gestation.** Preterm birth, defined as infants that are born prior to 37 weeks of gestation, is a major cause of infant mortality and has been associated with long-term neurodevelopment and respiratory disorders. The percentage of births that are preterm has risen steadily over the past decade. In 1989, 10.6 of all births were preterm, and this percentage had risen to as high as 12.0 in 2002 (Table HC 2.1.B). It appears that the rising number of preterm infants born to White, non-Hispanic females account for much of this increase. This percentage has risen from 8.4 in 1989 to 11.0 percent in 2002. In comparison, the percentage of preterm infants born to Black, non-Hispanic females has decreased (from 19 percent in 1989 to 17.6 percent in 2001).

**Differences by Birthweight.** The percentage of children born weighing more than 2,500 (5 lb. 8oz.) grams was 92.3 in 2001. White, non-Hispanics and Hispanics had similarly high percentages with 93.2 and 93.5 percent respectively. The percentage of infants weighing more than 2,500 grams born to Black, non-Hispanic females was much lower however, at 86.9 percent (Table HC 2.1.A).

**Differences by Prenatal Care.** Early prenatal care (care beginning within the first trimester of pregnancy) can promote healthier births by detecting and managing preexisting medical conditions and by providing health advice to the mother.<sup>2</sup> In 2001, 88.5 percent of all White, non-Hispanic females received prenatal care sometime during their first trimester of pregnancy. Both Hispanic and Black, non-Hispanic females were less likely to receive prenatal care at 75.7 and 74.5 percent, respectively (Table HC 2.1.A).

<sup>1</sup> The Apgar score is a numerical expression of the physical condition of an infant shortly after delivery and is used to predict the newborn's chance of survival. See Glossary for more information. As defined in Apgar, V., Holiday, D. A., James, L. S., Weisbort, I. N., & Berrien, C. (1953). *Current Research in Anesthesia and Analgesia*. Philadelphia, PA: Lippincott Williams and Wilkins.

<sup>2</sup> Ibid.

**Table HC 2.1.A**

Percentage of all births defined as healthy, by race and Hispanic origin of mother: 2001

	Gestational age 37 weeks +	Birthweight 2,500 grams +	Apgar score 7 or above <sup>a</sup>	Prenatal care 1st trimester
<b>All healthy births</b>	88.1	92.3	98.6	83.4
White, non-Hispanic	89.2	93.2	98.8	88.5
Black, non-Hispanic	82.4	86.9	97.7	74.5
Hispanic <sup>b</sup>	88.6	93.5	98.9	75.7

<sup>a</sup> The Apgar score is a numerical expression of the physical condition of an infant shortly after delivery. In this table, the Apgar score excludes data for California and Texas, which did not report the score on the birth certificate.

<sup>b</sup> Persons of Hispanic origin may be of any race.

Source: Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, F., Park, M. M., & Sutton, P. D. (2002). Births: Final Data for 2001. *National Vital Statistics Reports*, 51(2).

**Table HC 2.1.B**

Percent of preterm live births by race and Hispanic origin of mother: 1989-2002

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002 <sup>a</sup>
<b>All preterm live births<sup>b</sup></b>	10.6	10.6	10.8	10.7	11.0	11.0	11.0	11.0	11.4	11.6	11.8	11.6	11.9	12.0
White, non-Hispanic	8.4	8.5	8.7	8.7	9.1	9.3	9.4	9.5	9.9	10.2	10.5	10.4	10.8	11.0
Black, non-Hispanic	19.0	18.9	19.0	18.5	18.6	18.2	17.8	17.5	17.6	17.6	17.6	17.4	17.6	—
Hispanic <sup>c</sup>	11.1	11.0	11.0	10.7	11.0	10.9	10.9	10.9	11.2	11.4	11.4	11.2	11.4	11.6

<sup>a</sup> Data for 2002 are preliminary.

<sup>b</sup> Infants born prior to 37 weeks of gestation.

<sup>c</sup> Persons of Hispanic origin may be of any race. The 1989 data by Hispanic origin exclude New Hampshire, Oklahoma, and Louisiana, which did not report Hispanic origin. The 1990 data by Hispanic origin exclude New Hampshire and Oklahoma, which did not report Hispanic origin. The 1991 and 1992 data by Hispanic origin exclude New Hampshire, which did not report Hispanic origin.

— Data not available.

Sources: Hamilton, B.E., Martin, J.A., & Sutton, P.D. (2003). Births: Preliminary Data for 2002. *National Vital Statistics Reports*, 51(11); Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, F., Park, M. M., & Sutton, P. D. (2002). Births: Final Data for 2001. *National Vital Statistics Reports*, 51(2); Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, F., & Park, M. M. (2002). Births: Final Data for 2000. *National Vital Statistics Reports*, 50(5).

## HC 2.2 Low and Very Low Birthweight

Babies born weighing less than 2,500 grams (5lb. 8oz.) face an increased risk of physical and developmental complications and death.<sup>1</sup> These low birthweight babies account for four-fifths of all neonatal deaths (deaths under 28 days of age) and are 24 times more likely to die during the first year than are heavier infants.<sup>2</sup> Although slight declines were seen in the early 1980s, overall the percentage of all infants born at low birthweights has increased steadily since 1985 (Table HC 2.2.A). Much of the rise in the overall rate of low birthweight births can be attributed to the increased incidence of multiple births. In 2000, 23 percent of all low birthweight infants were born in a twin, triplet, or higher order delivery.<sup>3</sup>

Babies born to females who smoke during pregnancy are at elevated risk of low birthweight. In 2001, 11.9 percent of infants born to smokers were of low birthweight compared with 7.3 percent of births to nonsmokers (Figure HC 2.2.A). The low birthweight risk is heightened as the number of cigarettes increases, although low birthweight is elevated even among babies born to the lightest smokers (one to five cigarettes daily).<sup>4</sup>

Like low birthweight babies, very low birthweight babies, those born weighing less than 1,500 grams (3lb. 4oz.), are at particularly high risk of severe physical and developmental complications and death. In fact, the risk of early death increases as birthweight declines. Advances in medical technology in recent years have made it possible for increasing numbers of very low birthweight infants to survive. However, these babies are 96 times more likely to die during the first year of life than babies weighing at least 2,500 grams.<sup>5</sup> The percentage of very low birthweight infants increased from 1.2 percent in 1970 to 1.5 percent in 1999, and decreased to 1.2 percent in 2002.

**Differences by Race and Hispanic Origin.**<sup>6</sup> Low birthweight rates are substantially higher among Black infants than among other races and Hispanics. Among Asians/Pacific Islanders, Chinese females have consistently had the lowest percentage of low-weight births, and Filipino females have had the highest. Among Hispanics, Mexican American females have generally had the lowest percentage of low birthweight infants, while Puerto Rican females have had the highest (Table HC 2.2.A).

The percentage of babies born at very low birthweight also varies by race and Hispanic origin. For White, Hispanic, American Indian/Alaska Native, and Asian/Pacific Islander infants, the percentage of very low-weight births was about 1 percent in 2001. However, the percentage of Black infants born at very low birthweight is considerably higher (Table HC 2.2.B).

**Differences by Age.** Low birthweight rates tend to be highest for the youngest (less than 15 years) and the oldest females (ages 45-54 years), but much of the risk for the older group is attributed to their higher multiple birth rates (Figure HC 2.2.B and Figure HC 2.2.C). For 2001, one-third of all low birthweight infants born to females 45 and older were born in a multiple delivery, compared with 11 percent of infants born to females under 20 years of age.<sup>7</sup>

<sup>1</sup> Mathews, T. J., Curtin, S. C., & MacDorman, M. F. (2000). Infant Mortality Statistics from the 1998 Period Linked Birth/Infant Death Data Set. *National Vital Statistics Reports*, 48(12).

<sup>2</sup> Ibid.

<sup>3</sup> Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, F., & Park, M. M. (2002). Births: Final Data for 2000. *National Vital Statistics Reports*, 50(5).

<sup>4</sup> Ventura, S. J., Martin, J. A., Curtin, S. C., Menacker, F., & Hamilton, B. E. (2001). Births: Final Data for 1999. *National Vital Statistics Reports*, 49(1).

<sup>5</sup> Mathews, T. J., Curtin, S. C., & MacDorman, M. F. (2000). Infant Mortality Statistics from the 1998 Period Linked Birth/Infant Death Data Set. *National Vital Statistics Reports*, 48(12).

<sup>6</sup> Persons of Hispanic origin may be of any race. Estimates for Whites and Blacks include Hispanics of those races until 1990. After 1990, persons of Hispanic origin are not included.

<sup>7</sup> Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, F., Park, M. M., & Sutton, P. D. (2002). Births: Final Data for 2001. *National Vital Statistics Reports*, 21(2).

SECTION 3. HEALTH CONDITIONS AND HEALTH CARE

Table HC 2.2.A

Low birthweight infants as a percentage of all infants by race and Hispanic origin of mother and by age: Selected years, 1970-2002

	1970	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002 <sup>a</sup>
<b>All low birthweight infants<sup>b</sup></b>	7.9	7.4	6.8	6.8	7.0	7.3	7.4	7.5	7.6	7.6	7.6	7.7	7.8
<b>Race and Hispanic origin of mother<sup>c</sup></b>													
White	6.8	6.3	5.7	5.6	5.6	6.2	6.4	6.5	6.6	6.6	6.6	6.8	6.9
Black	13.9	13.2	12.5	12.4	13.3	13.2	13.1	13.1	13.2	13.2	13.1	13.1	—
American Indian/Alaskan Native	8.0	6.4	6.4	5.9	6.1	6.6	6.5	6.8	6.8	7.1	6.8	7.3	—
Asian/Pacific Islander	—	—	6.5	6.2	6.5	6.9	7.1	7.2	7.4	7.4	7.3	7.5	—
Chinese	6.7	5.3	4.9	5.0	4.7	5.3	5.0	5.1	5.3	5.2	5.1	5.3	—
Japanese	9.0	7.5	6.2	5.9	6.2	7.3	7.3	6.8	7.5	7.9	7.1	7.3	—
Filipino	10.0	8.1	7.4	6.9	7.3	7.8	7.9	8.3	8.2	8.3	8.5	8.7	—
Hawaiian and part Hawaiian	—	—	7.0	6.4	7.2	6.8	6.8	7.2	7.2	7.7	6.8	7.9	—
Other Asian or Pacific Islander	—	—	6.8	6.1	6.6	7.1	7.4	7.5	7.8	7.8	7.7	7.8	—
Hispanic origin	—	—	6.1	6.2	6.1	6.3	6.3	6.4	6.4	6.4	6.4	6.5	6.5
Mexican American	—	—	5.6	5.8	5.5	5.8	5.9	6.0	6.0	5.9	6.0	6.1	—
Puerto Rican	—	—	8.9	8.7	9.0	9.4	9.2	9.4	9.7	9.3	9.3	9.3	—
Cuban	—	—	5.6	6.0	5.7	6.5	6.5	6.8	6.5	6.8	6.5	6.5	—
Central and South American	—	—	5.8	5.7	5.8	6.2	6.0	6.3	6.5	6.4	6.3	6.5	—
Other and unknown Hispanic	—	—	7.0	6.8	6.9	7.5	7.7	7.9	7.6	7.6	7.8	8.0	—
<b>Age of mother</b>													
Under age 15	16.6	14.1	14.6	12.9	13.3	13.5	12.8	13.6	13.1	12.9	14.1	12.8	13.4
Ages 15-19	10.5	10.0	9.4	9.3	9.3	9.3	9.3	9.5	9.5	9.6	9.5	9.4	9.6
Ages 20-24	7.4	7.1	6.9	6.9	7.1	7.3	7.4	7.4	7.5	7.6	7.6	7.8	7.9
Ages 25-29	6.9	6.1	5.8	5.9	6.2	6.4	6.5	6.6	6.7	6.7	6.7	6.8	6.9
Ages 30-34	7.5	6.8	5.9	6.0	6.4	6.7	6.8	6.9	7.0	7.0	6.9	7.0	7.2
Ages 35-39	—	—	7.0	6.9	7.3	8.1	8.1	8.3	8.4	8.4	8.3	8.4	8.5
Ages 40-44	—	—	8.3	8.3	8.0	9.3	9.5	9.7	9.9	10.1	10.0	10.1	—
Ages 45-54 <sup>d</sup>	—	—	9.2	10.3	10.2	15.2	14.9	17.4	18.6	18.3	18.2	20.5	—

<sup>a</sup> Data for 2002 are preliminary.

<sup>b</sup> Before 1979, low birthweight was defined as infants weighing 2,500 grams (5lb. 8oz.) or less. From 1979 and beyond, low birthweight was defined as infants weighing less than 2,500 grams (5lb. 8oz.).

<sup>c</sup> Persons of Hispanic origin may be of any race. Estimates for Whites and Blacks include Hispanics of those races until 1990. After 1990, persons of Hispanic origin are not included. Birth figures for Hispanic infants are based on data from 22 states that reported Hispanic origin on the birth certificate in 1980, 23 states and the District of Columbia in 1985, 48 states and the District of Columbia in 1990, and 50 states and the District of Columbia since 1993

<sup>d</sup> Before 1997, this category was 45-49 years.

— Data not available.

Sources: National Center for Health Statistics. (2003). Unpublished work; Hamilton, B.E., Martin, J.A., & Sutton, P.D. (2003). Births: Preliminary Data for 2002. *National Vital Statistics Reports*, 51(11). Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, E., Park, M. M., & Sutton, P. D. (2002). Births: Final Data for 2001. *National Vital Statistics Reports*, 51(2); Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, E., & Park, M. M. (2002). Births: Final Data for 2000. *National Vital Statistics Reports*, 50(5); Ventura, S. J., Martin, J. A., Curtin, S. C., Menacker, E., & Hamilton, B. E. (2001). Births: Final Data for 1999. *National Vital Statistics Reports*, 49(1); Ventura, S. J., Martin, J. A., Curtin, S. C., Mathews, T. J., & Park, M. M. (2000). Births: Final Data for 1998. *National Vital Statistics Reports*, 48(3); Ventura, S. J., Martin, J. A., Curtin, S. C., & Mathews, T. J. (1999). Births: Final Data for 1997. *National Vital Statistics Reports*, 47(18); Ventura, S. J., Martin, J. A., Curtin, S. C., & Mathews, T. J. (1998). Report of Final Natality Statistics, 1996. *Monthly Vital Statistics Reports*, 46(Supp. 11); Ventura, S. J., Martin, J. A., Curtin, S. C., Mathews, T. J., & Park, M. M. (1997). Report of Final Natality Statistics, 1995. *Monthly Vital Statistics Reports*, 45(11[Supp. 2]); National Center for Health Statistics. (1996). Health, United States, 1995. Hyattsville, MD: National Center for Health Statistics; Ventura, S. J. & Martin, J. A. (1993). Report of Final Natality Statistics, 1990. *Monthly Vital Statistics Reports*, 41(Supp. 9); National Center for Health Statistics. (1987). Advance Report of Final Natality Statistics, 1985. *Monthly Vital Statistics Report*, 36(4 (Supp)); Ventura, S. J. (1987) Births of Hispanic Parentage, 1985. *Monthly Vital Statistics Reports*, 36(Supp. 11); Taffel, S. (1984). Characteristics of Asian Births, United States, 1980. *Monthly Vital Statistics Report*, 32(Supp 10); Ventura, S. J. (1983). Births to Hispanic Parentage: 1980. *Monthly Vital Statistics Reports*, 32(36[6 Supp]); Ventura, S. J. (1982). Advance Report of Final Natality Statistics, 1980. *Monthly Vital Statistics Reports*, 31(Supp. 8).

Figure HC 2.2.A

Percentage of children born with low birthweight, by mother's smoking status, age, and race and Hispanic origin: 2001

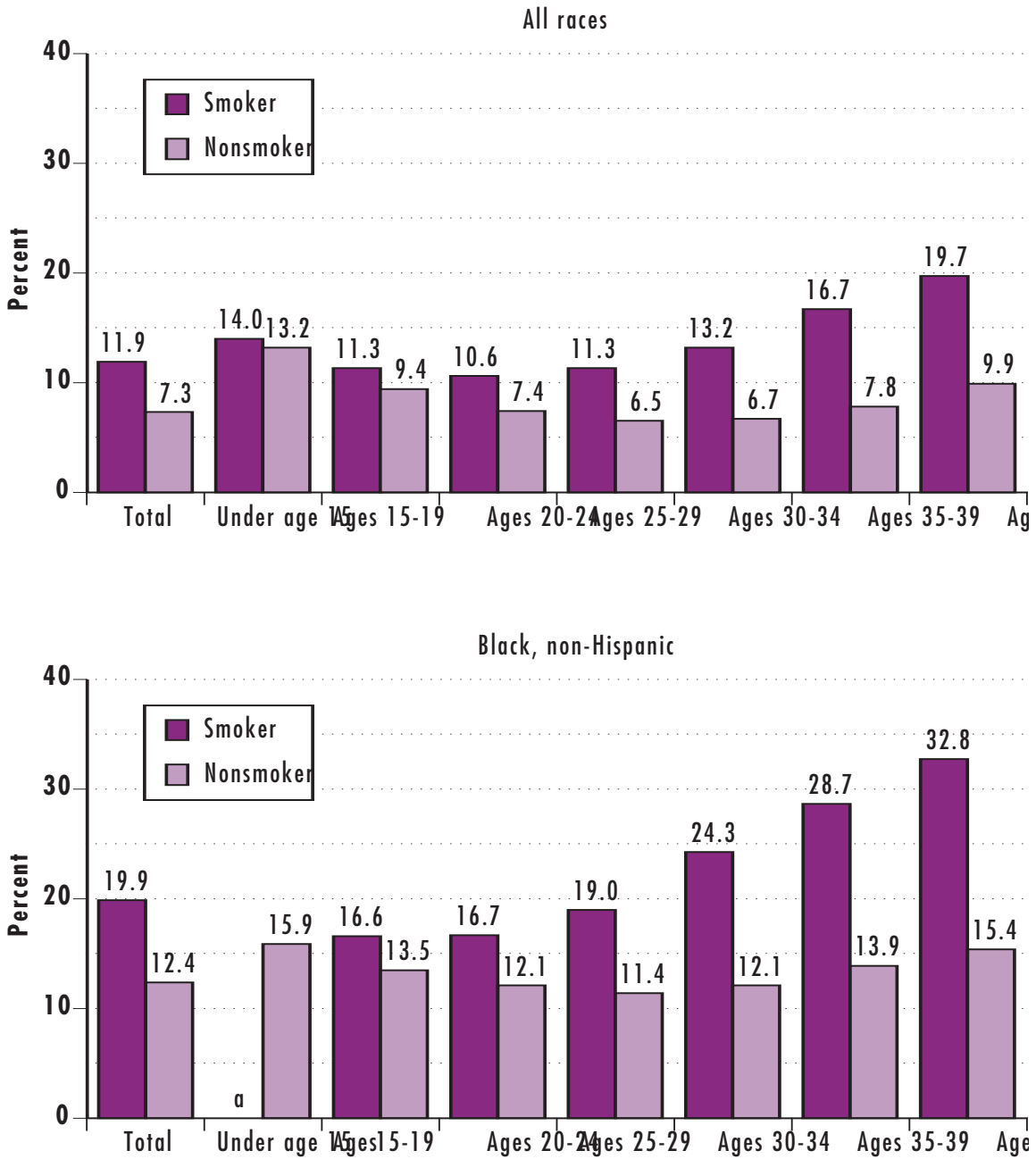
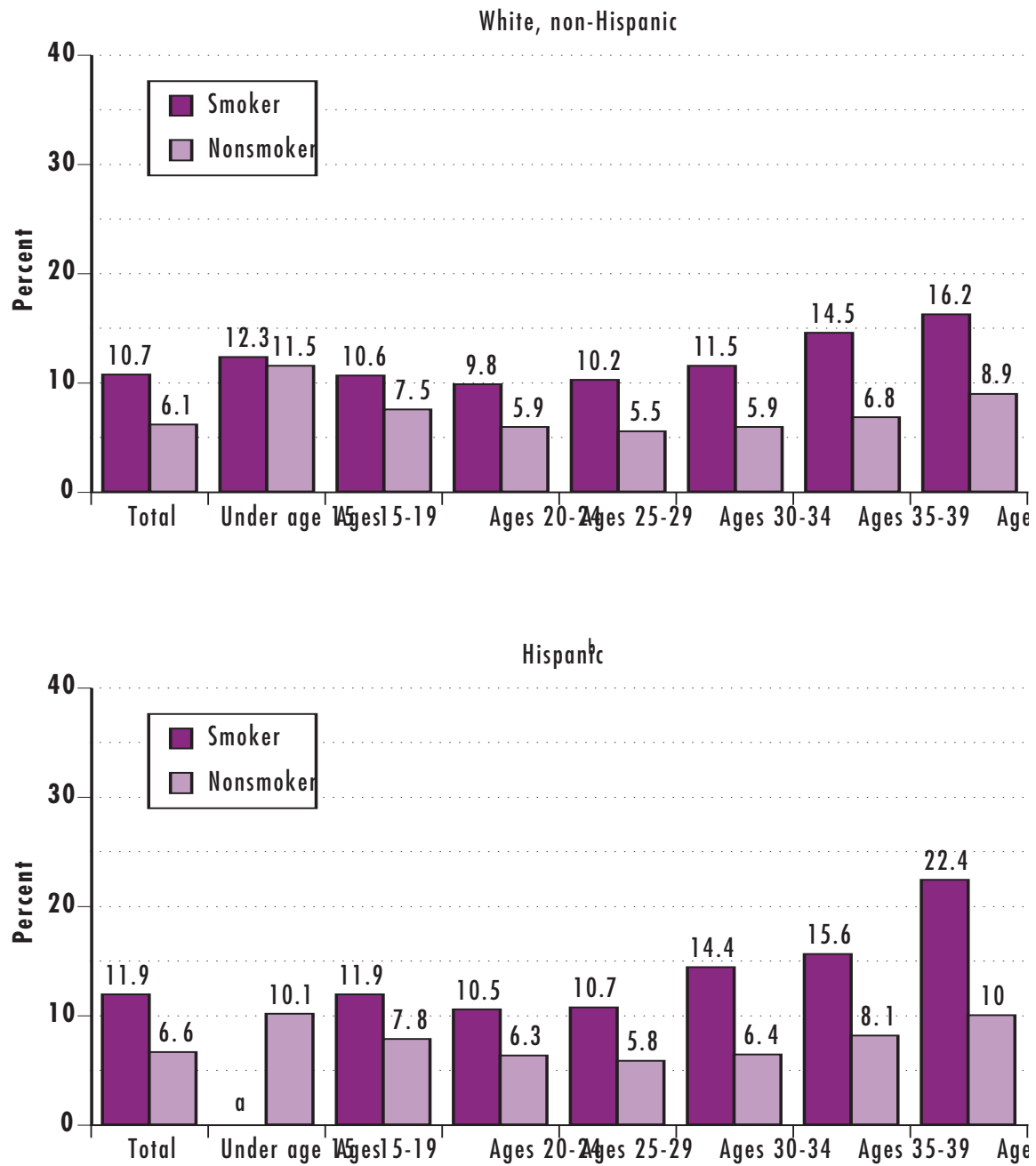


Figure HC 2.2.A continued

Percentage of children born with low birthweight, by mother's smoking status, age, and race and Hispanic origin: 2001



<sup>a</sup> Data for smokers under 15 years did not meet standards of reliability or precision; based on fewer than 20 births in the numerator.

<sup>b</sup> Persons of Hispanic origin may be of any race.

Note: Low birthweight is defined as infants weighing less than 2,500 grams (5lb. 8oz.)

Source: Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, F., Park, M. M., & Sutton, P.D. (2002). Births: Final Data for 2001. *National Vital Statistics Reports*, 51(2).

**Table HC 2.2.B**

Very low birthweight infants as a percentage of all infants by race and Hispanic origin of mother and by age: Selected years, 1970-2002

	1970	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002 <sup>a</sup>
<b>Very low birthweight infants<sup>b</sup></b>	1.2	1.2	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.4	1.4	1.4
<b>Race and Hispanic origin of mother<sup>c</sup></b>													
White	1.0	0.9	0.9	0.9	0.9	1.0	1.1	1.1	1.1	1.2	1.1	1.2	1.2
Black	2.4	2.4	2.5	2.7	2.9	3.0	3.0	3.1	3.1	3.2	3.1	3.1	—
American Indian/Alaska Native	1.0	1.0	0.9	1.0	1.0	1.1	1.2	1.2	1.2	1.3	1.2	1.3	—
Asian/Pacific Islander	—	—	0.9	0.9	0.9	0.9	1.0	1.1	1.1	1.1	1.0	1.0	—
Chinese	0.8	0.5	0.7	0.6	0.5	0.7	0.6	0.7	0.7	0.7	0.8	0.7	—
Japanese	1.5	0.9	0.9	0.8	0.7	0.9	0.8	0.8	0.8	0.9	0.7	0.7	—
Filipino	1.1	0.9	1.0	0.9	1.1	1.1	1.2	1.3	1.3	1.4	1.4	1.2	—
Hawaiian and part Hawaiian	—	—	1.1	1.0	1.0	0.9	1.0	1.4	1.5	1.4	1.4	1.5	—
Other Asian or Pacific Islander	—	—	1.0	0.9	0.9	0.9	1.0	1.1	1.1	1.1	1.0	1.1	—
Hispanic origin	—	—	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2
Mexican American	—	—	0.9	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—
Puerto Rican	—	—	1.3	1.3	1.6	1.8	1.7	1.8	1.9	1.9	1.9	1.8	—
Cuban	—	—	1.0	1.2	1.2	1.2	1.3	1.4	1.3	1.5	1.2	1.3	—
Central and South American	—	—	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.1	1.2	1.2	—
Other and unknown Hispanic	—	—	1.0	1.0	1.1	1.3	1.5	1.3	1.4	1.3	1.4	1.3	—
<b>Age of mother</b>													
Under age 15	—	3.1	3.4	3.1	3.2	3.2	3.2	3.1	3.3	3.2	3.3	3.0	3.1
Ages 15-19	—	1.8	1.7	1.8	1.8	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8
Ages 20-24	—	1.1	1.1	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4
Ages 25-29	—	0.9	1.0	1.0	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3
Ages 30-34	—	1.0	1.0	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.3	1.3	1.4
Ages 35-39	—	—	1.1	1.3	1.4	1.5	1.6	1.6	1.6	1.7	1.6	1.6	1.6
Ages 40-44	—	—	1.4	1.5	1.5	1.8	1.9	1.9	1.9	2.0	1.9	1.9	—
Ages 45-54 <sup>d</sup>	—	—	1.8	1.8	1.7	2.8	2.7	3.9	4.2	3.5	3.4	3.9	—

<sup>a</sup> Data for 2002 are preliminary.

<sup>b</sup> Before 1979, low birthweight was defined as infants weighing 2,500 grams (5lb. 8oz.) or less. From 1979 and beyond, low birthweight was defined as infants weighing less than 2,500 grams (5lb. 8oz.).

<sup>c</sup> Persons of Hispanic origin may be of any race. Estimates for Whites and Blacks include Hispanics of those races until 1990. After 1990, persons of Hispanic origin are not included. Birth figures for Hispanic infants are based on data from 22 states that reported Hispanic origin on the birth certificate in 1980, 23 states and the District of Columbia in 1985, 48 states and the District of Columbia in 1990, and 50 states and the District of Columbia since 1993

<sup>d</sup> Before 1997, this category was 45-49 years.

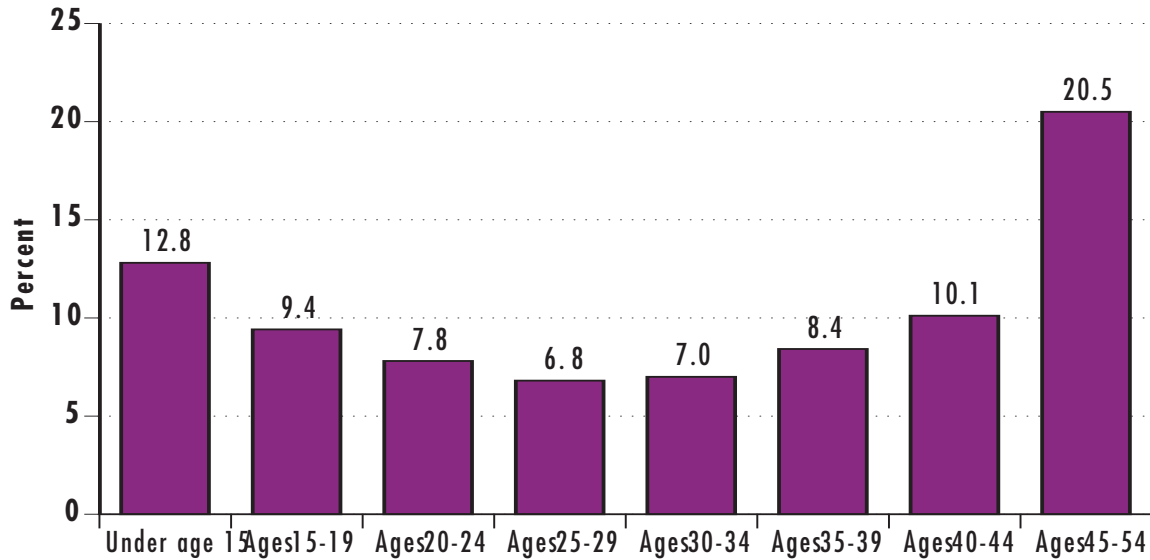
— Data not available.

Sources: National Center for Health Statistics. (2003). Unpublished work; Hamilton, B.E., Martin, J.A., & Sutton, P.D. (2003). Births: Preliminary Data for 2002. *National Vital Statistics Reports*, 51(11). Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, F., Park, M. M., & Sutton, P. D. (2002). Births: Final Data for 2001. *National Vital Statistics Reports*, 51(2); Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, F., & Park, M. M. (2002). Births: Final Data for 2000. *National Vital Statistics Reports*, 50(5); Ventura, S. J., Martin, J. A., Curtin, S. C., Menacker, F., & Hamilton, B. E. (2001). Births: Final Data for 1999. *National Vital Statistics Reports*, 49(1); Ventura, S. J., Martin, J. A., Curtin, S. C., Mathews, T. J., & Park, M. M. (2000). Births: Final Data for 1998. *National Vital Statistics Reports*, 48(3); Ventura, S. J., Martin, J. A., Curtin, S. C., & Mathews, T. J. (1999). Births: Final Data for 1997. *National Vital Statistics Reports*, 47(18); Ventura, S. J., Martin, J. A., Curtin, S. C., & Mathews, T. J. (1998). Report of Final Natality Statistics, 1996. *Monthly Vital Statistics Reports*, 46(Supp. 11); Ventura, S. J., Martin, J. A., Curtin, S. C., Mathews, T. J., & Park, M. M. (1997). Report of Final Natality Statistics, 1995. *Monthly Vital Statistics Reports*, 45(11[Supp. 2]); National Center for Health Statistics. (1996). Health, United States, 1995. Hyattsville, MD: National Center for Health Statistics; Ventura, S. J. & Martin, J. A. (1993). Report of Final Natality Statistics, 1990. *Monthly Vital Statistics Reports*, 41(Supp. 9); National Center for Health Statistics. (1987). Advance Report of Final Natality Statistics, 1985. *Monthly Vital Statistics Report*, 36(4 (Supp)); Ventura, S. J. (1982). Advance Report of Final Natality Statistics, 1980. *Monthly Vital Statistics Reports*, 31(Supp. 8).



Figure HC 2.2.B

Low birthweight infants as a percentage of all infants, by age of mother: 2001

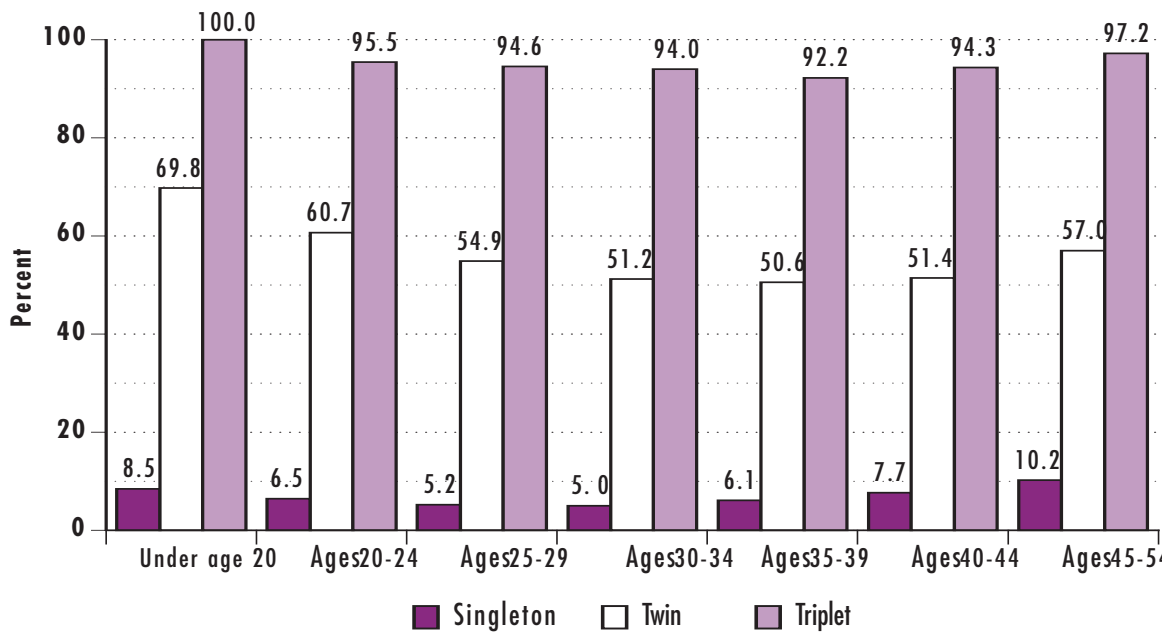


Note: Low birthweight is defined as infants weighing less than 2,500 grams (5lb. 8oz.)

Source: Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, F., Park, M. M., & Sutton, P. D. (2002). Births: Final Data for 2001. *National Vital Statistics Reports*, 51(2).

Figure HC 2.2.C

Percentage of children born with low birthweight, by plurality and age of mother: 2001



Note: Low birthweight is defined as infants weighing less than 2,500 grams (5lb. 8oz.)

Source: National Center for Health Statistics. (2003). Unpublished work.

## HC 2.3 Children in Very Good or Excellent Health

The health of children and youth is fundamental to their well-being and future development. Most parents in the United States report that their children are in very good or excellent health. The percentage of all children under age 18 reported to be in very good or excellent health has remained close to 80 percent since 1985 (Table HC 2.3).

**Differences by Race and Hispanic Origin.**<sup>1</sup> Parents' reports of their children's health vary by race and Hispanic origin. Between 1985 and 2001, Black, non-Hispanic and Hispanic parents were less likely than White, non-Hispanic parents to report that their children were in very good or excellent health. In 2001, 78 percent of Black, non-Hispanic children and 80 percent of Hispanic children under age 5 were reported to be in very good or excellent health, compared to 89 percent of White, non-Hispanic children. Seventy-two percent of Black, non-Hispanic children and 76 percent of Hispanic children ages 5 to 17 were reported in very good or excellent health, compared with 87 percent of White, non-Hispanic children in this age group (Table HC 2.3).

**Differences by Poverty Status.** Parents' reports of their children's health also vary by family income, with higher income families more likely to report that their children are in very good or excellent health (Figure HC 2.3). For example, in 2001, 71 percent of children under age 18 who fell below the poverty line were reported to be in very good or excellent health, compared with 86 percent for children at or above the poverty line. Seventy-four percent of children under age 5 in families below poverty were reported to be in very good or excellent health, compared with 88 percent of children in families at or above poverty in 2001. For children ages 5 to 17 in families below the poverty line, 70 percent were reported to be in very good or excellent health, compared to 86 percent of children in families at or above the poverty line in 2001.

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<sup>1</sup> Persons of Hispanic origin may be of any race. Estimates for Whites and Blacks include Hispanics of those races.

SECTION 3. HEALTH CONDITIONS AND HEALTH CARE

**Table HC 2.3**

Percentage of children under age 18 who are reported by their parents to be in very good or excellent health, by age, race and Hispanic origin, poverty status: Selected years, 1985-2001

	1985	1990	1995	1996	1997	1998	1999	2000	2001
<b>All healthy children</b>	79	81	80	81	82	83	83	82	84
<b>Race and Hispanic origin<sup>a</sup></b>									
White, non-Hispanic	84	85	85	85	87	88	87	86	88
Black, non-Hispanic	66	69	71	74	73	74	74	74	75
Hispanic	68	75	69	69	73	74	77	75	77
<b>Poverty status</b>									
Below poverty	64	66	65	66	68	70	71	70	72
At or above poverty	84	84	84	85	86	87	86	85	87
<b>Under age 5</b>	80	81	81	81	84	85	85	85	85
<b>Race and Hispanic origin<sup>a</sup></b>									
White, non-Hispanic	86	85	86	86	89	90	89	89	89
Black, non-Hispanic	67	72	72	75	77	77	78	77	78
Hispanic	69	75	70	69	75	77	78	77	81
<b>Poverty status</b>									
Below poverty	69	70	67	69	74	76	73	74	76
At or above poverty	85	85	85	85	88	89	88	88	88
<b>Ages 5-17</b>	78	80	80	81	81	82	82	81	83
<b>Race and Hispanic origin<sup>a</sup></b>									
White, non-Hispanic	83	84	85	85	86	87	86	85	87
Black, non-Hispanic	66	67	70	73	71	72	73	73	73
Hispanic	67	75	69	69	72	73	76	74	75
<b>Poverty status</b>									
Below poverty	62	64	64	65	65	67	70	68	69
At or above poverty	83	84	84	85	86	87	86	84	86

<sup>a</sup> Persons of Hispanic origin may be of any race.

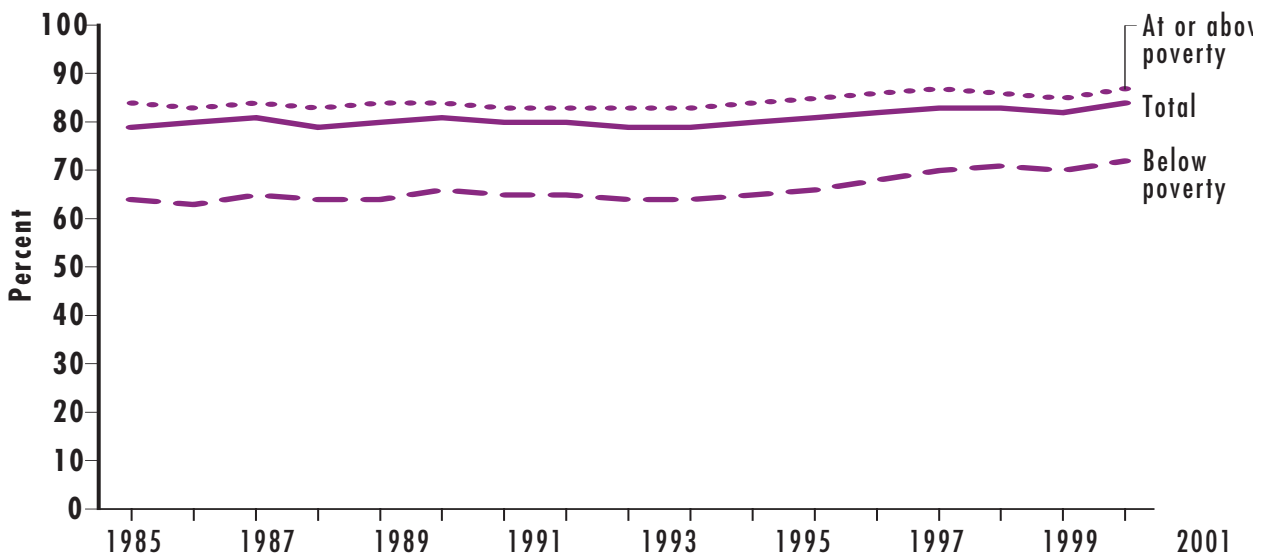
Note: In 1997, the National Health Interview Survey was redesigned. Data for 1997 onward are not strictly comparable with earlier data.

Source: Federal Interagency Forum on Child and Family Statistics. (2003). *America's Children: Key National Indicators of Well-Being, 2003*. Washington, DC: U.S. Government Printing Office.

## Health Conditions

**Figure HC 2.3**

Percentage of children under age 18 who are reported by their parents to be in very good or excellent health, by poverty status: 1985-2001



Note: In 1997, the National Health Interview Survey was redesigned. Data for 1997 onward are not strictly comparable with earlier data.

Source: Federal Interagency Forum on Child and Family Statistics. (2003). *America's Children: Key National Indicators of Well-Being, 2003*. Washington, DC: U.S. Government Printing Office.

## SECTION 3. HEALTH CONDITIONS AND HEALTH CARE

## HC 2.4 Chronic Health Conditions

Chronic conditions are longstanding illnesses or impairments that are not easily or quickly resolved or that are continuous or persistent over an extended time period. They can cause children to miss school and often require medical assistance and followup. In fact, children with asthma, one of the most common chronic conditions in the United States, miss an average of twice as many school days as children without asthma.<sup>1</sup> Chronic conditions can increase a family's medical expenses, create stress for children and their parents, and also can cause parents to be absent from work.<sup>2</sup>

The percentage of children with asthma increased slightly between 1997 and 2001. In 2001, approximately 13 percent of children under 18 had asthma. While another 13 percent of children had respiratory allergies in 2001, the percentage of children with respiratory allergies has remained stable since 1997. An estimated 11 percent of children had other allergies and 10 percent of children suffered from hay fever in 2001 (Table HC 2.4).

**Differences by Sex.** Males are more likely to suffer from asthma, hay fever, and respiratory allergies than females. For example, in 2001, approximately 15 percent of males and 11 percent of females had asthma. Similar percentages of males and females suffer from other allergies, such as food or skin allergies (Table HC 2.4).

**Differences by Age.** Among children with asthma, hay fever, and respiratory allergies, older children are more likely to have these chronic conditions than younger children. For example, in 2001, 14 percent of children ages 12 to 17 had hay fever, while only 5 percent of children under age 5 suffered from this condition. However, these differences could be a result of more children presenting symptoms as they grow older. Among children with other allergies, children under age 5 are more likely than older children to have this condition (Table HC 2.4).

**Differences by Race and Hispanic Origin.** Black, non-Hispanic children are more likely to suffer from asthma and other allergies, while White, non-Hispanic children are more likely to have hay fever and respiratory allergies. In 2001, approximately 16 percent of Black, non-Hispanic children suffered from asthma, while 12 percent of White, non-Hispanic, and 11 percent of Hispanic children had the same condition (Figure HC 2.4).

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<sup>1</sup> U.S. Department of Health and Human Services. (1998). *HHS Targets Efforts on Asthma: Fact Sheet*.

<sup>2</sup> Summer, L. & O'Neill, G. *Challenges for the 21st Century*. (1999). Washington, DC: National Academy of an Aging Society.

SECTION 3. HEALTH CONDITIONS AND HEALTH CARE

**Table HC 2.4**

Percentage of children with selected health conditions, by sex, age, and race and Hispanic origin, 1997-2001

	1997	1998	1999	2000	2001
<b>All children with asthma</b>	11.4	12.1	10.8	12.4	12.7
Sex					
Male	13.0	14.7	12.9	14.8	14.5
Female	9.7	9.3	8.5	9.8	10.7
Age					
Under age 5	7.1	8.3	7.0	7.8	7.9
Ages 5-11	12.3	13.0	11.9	12.2	13.3
Ages 12-17	14.0	14.2	12.6	16.2	15.8
Race and Hispanic origin <sup>a</sup>					
White, non-Hispanic	11.2	12.0	10.1	12.1	12.2
Black, non-Hispanic	13.6	15.7	13.8	16.0	15.7
Hispanic	10.1	10.1	10.1	9.9	11.2
<b>All children with hay fever</b>	10.4	10.5	10.3	9.9	10.2
Sex					
Male	11.1	10.9	11.0	10.8	11.0
Female	9.6	10.1	9.5	8.8	9.3
Age					
Under age 5	4.6	4.7	4.3	4.4	4.8
Ages 5-11	11.0	11.4	10.7	9.5	10.5
Ages 12-17	14.6	14.3	13.7	14.8	14.2
Race and Hispanic origin <sup>a</sup>					
White, non-Hispanic	11.3	11.6	11.1	11.1	11.8
Black, non-Hispanic	8.7	8.6	9.9	8.4	8.3
Hispanic	8.2	7.9	7.4	6.7	6.1
<b>All children with respiratory allergies</b>	12.0	12.2	10.8	11.5	12.6
Sex					
Male	12.8	12.8	12.0	12.2	13.3
Female	11.1	11.5	9.6	10.7	11.9
Age					
Under age 5	8.3	8.6	6.9	8.2	8.8
Ages 5-11	12.2	13.1	11.1	12.2	13.2
Ages 12-17	14.8	14.0	13.1	13.4	15.0
Race and Hispanic origin <sup>a</sup>					
White, non-Hispanic	13.5	13.6	12.1	13.0	14.3
Black, non-Hispanic	10.3	12.1	10.1	9.5	11.6
Hispanic	7.8	7.9	6.2	8.1	7.5

continued

## Health Conditions

**Table HC 2.4 continued**

Percentage of children with selected health conditions, by sex, age, and race and Hispanic origin, 1997-2001

	1997	1998	1999	2000	2001
<b>All children with other allergies<sup>a</sup></b>	10.3	10.2	9.2	9.9	10.7
<b>Sex</b>					
Male	10.1	9.7	9.5	10.0	10.5
Female	10.4	10.7	9.0	9.8	10.9
<b>Age</b>					
Under age 5	11.1	10.9	10.2	10.9	12.3
Ages 5-11	9.8	10.5	8.8	9.2	9.8
Ages 12-17	10.1	9.2	9.1	9.9	10.4
<b>Race and Hispanic origin<sup>b</sup></b>					
White, non-Hispanic	10.4	10.9	9.4	10.6	11.0
Black, non-Hispanic	12.2	10.7	10.2	10.1	12.3
Hispanic	7.3	7.4	6.7	6.7	7.4

<sup>a</sup> Other allergies include food or digestive allergies, eczema, or any kind of skin allergy.

<sup>b</sup> Persons of Hispanic origin may be of any race.

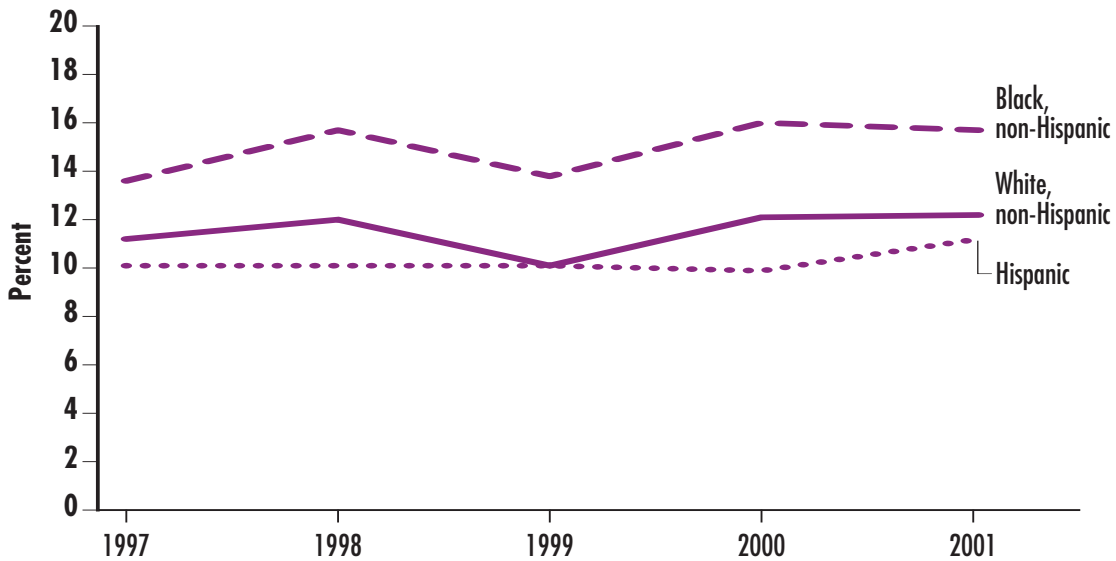
Note: Data are based on responses by parents or other adult respondents to questions asking if a doctor or other health professional has ever told them if their child has the selected health condition. A child may be counted in more than one category.

Sources: National Center for Health Statistics. (2003). Unpublished work; Blackwell, D. L. & Tonthat, L. (2003). Summary Health Statistics for U.S. Children: National Health Interview Survey, 1999. *Vital Health Statistics*, 10(210); Blackwell, D. L., Vickerie, J. L., & Wondimu, E. A. (2003). Summary Health Statistics for U.S. Children: National Health Interview Survey, 2000. *Vital Health Statistics*, 10(213); Bloom, B., & Tonthat, L. (2002). Summary Health Statistics for U.S. Children: National Health Interview Survey, 1997. *Vital Health Statistics*, 10(203); Blackwell, D. L. & Tonthat, L. (2002). Summary Health Statistics for U.S. Children: National Health Interview Survey, 1998. *Vital Health Statistics*, 10(208).



**Figure HC 2.4**

Percentage of children with asthma, by race and Hispanic origin, 1997-2001



Sources: National Center for Health Statistics. (2003). Unpublished work; Blackwell, D. L. & Tonthat, L. (2003). Summary Health Statistics for U.S. Children: National Health Interview Survey, 1999. *Vital Health Statistics*, 10(210); Blackwell, D. L., Vickerie, J. L., & Wondimu, E. A. (2003). Summary Health Statistics for U.S. Children: National Health Interview Survey, 2000. *Vital Health Statistics*, 10(213); Bloom, B., & Tonthat, L. (2002). Summary Health Statistics for U.S. Children: National Health Interview Survey, 1997. *Vital Health Statistics*, 10(203); Blackwell, D. L. & Tonthat, L. (2002). Summary Health Statistics for U.S. Children: National Health Interview Survey, 1998. *Vital Health Statistics*, 10(208).

## HC 2.5 Overweight Prevalence

Youth who are overweight in adolescence are at greater risk of being overweight as adults, and adults who are overweight are at higher risk of numerous health problems, including hypertension, coronary heart disease, gallbladder disease, noninsulin-dependent diabetes, and some cancers.<sup>1</sup> Because being overweight in childhood and adolescence increases the risk of being overweight in adulthood, the trends in overweight prevalence among children and youth have become an important public health concern. Overall, the percentage of children ages 6 to 19 who are overweight<sup>2</sup> has increased more than threefold since the 1960s, with the largest increases seen since 1980 (Table HC 2.5.A).

One predictor of obesity is the amount of regular physical exercise. Sixty percent of Americans do not exercise regularly, according to a 1996 report by the surgeon general, despite the many health benefits associated with physical activity. People of all ages, both male and female, benefit from regular physical activity. Significant health benefits can be obtained by including a moderate amount of physical activity (e.g., 30 minutes of brisk walking or raking leaves, 15 minutes of running, or 45 minutes of playing volleyball) on most, if not all, days of the week.

The percentage of 12th-graders who report actively participating in sports or exercise “almost every day” has remained fairly stable since 1976, varying between 42 and 48 percent. Rates have also been stable for 8th- and 10th-graders since 1991, the first year in which data were collected for those grades (Table HC 2.5.B).

**Differences by Sex.** In the time period 1988-1994, 11.8 percent of males ages 6 to 11 were overweight, compared with 11 percent of females; 11.3 percent of males ages 12 to 19 were overweight, compared with 9.7 percent of females. By 1999-2000, 15.5 percent of both males and females ages 12 to 19 were overweight (Figure HC 2.5.A). Males consistently report exercising more often than females. In 2001, for each grade (9 to 12), male rates were 10 to 24 percentage points higher than female rates, a trend that exists for every year that data are available (Table HC 2.5.C).

<sup>1</sup> National Center for Health Statistics. (2001). *Health, United States, 2001, with Urban and Rural Health Chartbook*. Hyattsville, MD: National Center for Health Statistics; Trojano, R. P., Flegal, K. M., Kuczmarski, R. J., Campbell, S. M., & Johnson, C. L. (1995). Overweight Prevalence and Trends for Children and Adolescents: The National Health and Nutrition Examination Surveys, 1963-1991. *Archives of Pediatrics and Adolescent Medicine*, 149.

<sup>2</sup> Overweight is defined as body mass index (BMI) at or above the sex- and age-specific 95th percentile BMI cutoff points calculated at 6-month age intervals for children ages 6 through 11 [from the 1963-65 National Health Examination Survey (NHES)] and for adolescents ages 12 to 17 (from the 1966-70 NHES). Age is at time of examination at mobile examination center. This definition differs from that reported in earlier versions of this report, which was based on children at or above the 85th percentile of BMI.

**Differences by Age.** In the years 1963-1965, 4.2 percent of children ages 6 to 11 were overweight, with this percentage rising to 15.3 percent in 1999-2000. In the period 1966-1970, 4.6 percent of youth ages 12 to 19 were overweight, with this percentage rising to 15.5 percent during 1999-2000.

The percentages of youth who report that they actively participate in sports or exercise “almost every day” decreased with age. In 2002, for example, 54 percent of 8th graders, 50 percent of 10th graders, and 42 percent of 12th graders reported daily or almost daily exercise (Figure HC 2.5.B). A similar pattern emerged in a survey that asked youth whether they had exercised vigorously three or more times in the past week (Table HC 2.5.C).

**Differences by Race and Hispanic Origin.**<sup>3</sup> In 1999-2000, overweight prevalence among male children (ages 6 to 11) and youth (ages 12 to 19) differs by more than 5 percentage points between Black and White males. The percentage of overweight Black female children and youth is about 10 percentage points above that of their White peers (Table HC 2.5.A).

Black and White 10th graders are about equally likely to exercise regularly (Table HC 2.5.B). Among 12th graders, Blacks appeared to be somewhat less likely than Whites to exercise regularly. Other survey data, reported in Table HC 2.5.C, show larger differences by race and Hispanic origin. In 2001, 67 percent of White youth reported exercising vigorously at least 3 times a week, compared with 60 percent of Black, non-Hispanic youth and 61 percent of Hispanic youth.

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<sup>3</sup> Persons of Hispanic origin may be of any race.

## Health Conditions

**Table HC 2.5.A**

Percentage of overweight children and youth by age, sex, and race and Hispanic origin: Selected years, 1963-2000

	1963-1965	1966-1970	1971-1974	1976-1980	1988-1994	1999-2000
<b>Ages 6-11</b>	4.2	—	4.0	6.5	11.3	15.3
Male <sup>a</sup>	4.0	—	4.3	6.6	11.6	16.0
White, non-Hispanic	—	—	—	6.1	10.7	11.9 <sup>b</sup>
Black, non-Hispanic	—	—	—	6.8	12.3	17.6
Female <sup>a</sup>	4.5	—	3.6	6.4	11.0	14.5
White, non-Hispanic	—	—	—	5.2	9.8 <sup>b</sup>	12.0 <sup>b</sup>
Black, non-Hispanic	—	—	—	11.2	17.0	22.1
<b>Ages 12-19</b>	—	4.6	6.1	5.0	10.5	15.5
Male <sup>a</sup>	—	4.5	6.1	4.8	11.3	15.5
White, non-Hispanic	—	—	—	3.8	11.6	13.0
Black, non-Hispanic	—	—	—	6.1	10.7	20.5
Female <sup>a</sup>	—	4.7	6.2	5.3	9.7	15.5
White, non-Hispanic	—	—	—	4.6	8.9	12.2
Black, non-Hispanic	—	—	—	10.7	16.3	25.7

<sup>a</sup> Totals for male and female children and youth include data for race groups not shown separately.

<sup>b</sup> Estimate is considered unreliable because it has a relative standard error of 20-30 percent.

— Data not available.

Note: Overweight is defined as BMI at or above the sex- and age-specific 95th percentile BMI cutoff points calculated at 6-month age intervals for children ages 6 to 11 (from the 1963-65 NHES) and for youth ages 12 to 17 (from the 1966-70 NHES). Age is at time of examination at mobile examination center. Data for 1966-1970 are for youth 12-17 years of age, not 12-19 years.

Source: U.S. Department of Health and Human Services, National Center for Health Statistics. (2003). *Health, United States, 2003, with Chartbook on Trends in the Health of Americans*. Hyattsville, MD: National Center for Health Statistics.

SECTION 3. HEALTH CONDITIONS AND HEALTH CARE

**Table HC 2.5.B**

Percentage of 8th-, 10th- and 12th-graders who report that they actively participate in sports or exercise "almost every day" by sex and race: Selected years, 1976-2002

	1976	1981	1986	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<b>8th Grade</b>	—	—	—	57	55	55	53	56	54	55	53	53	54	53	54
Sex															
Male	—	—	—	65	65	65	63	66	63	63	61	60	61	60	61
Female	—	—	—	49	45	46	44	47	47	48	45	46	48	46	48
Race <sup>a</sup>															
White	—	—	—	58	56	58	56	59	57	58	56	55	57	56	58
Black	—	—	—	61	57	54	52	55	56	56	54	55	54	55	55
<b>10th Grade</b>	—	—	—	54	54	53	53	53	52	52	50	52	51	50	50
Sex															
Male	—	—	—	63	64	62	62	62	60	60	58	60	59	57	57
Female	—	—	—	45	45	45	44	45	44	45	42	44	44	44	44
Race <sup>a</sup>															
White	—	—	—	55	55	54	54	55	53	54	52	54	53	51	52
Black	—	—	—	54	52	56	50	52	53	52	47	47	48	51	52
<b>12th Grade</b>	44	48	44	46	46	44	45	45	45	45	44	45	42	43	42
Sex															
Male	52	56	54	55	59	55	56	55	58	56	53	54	49	56	50
Female	36	39	36	36	33	33	36	37	32	36	35	37	35	32	35
Race <sup>a</sup>															
White	43	47	46	48	48	46	49	46	48	46	46	48	44	46	45
Black	49	53	43	43	41	39	39	48	40	38	38	40	37	43	42

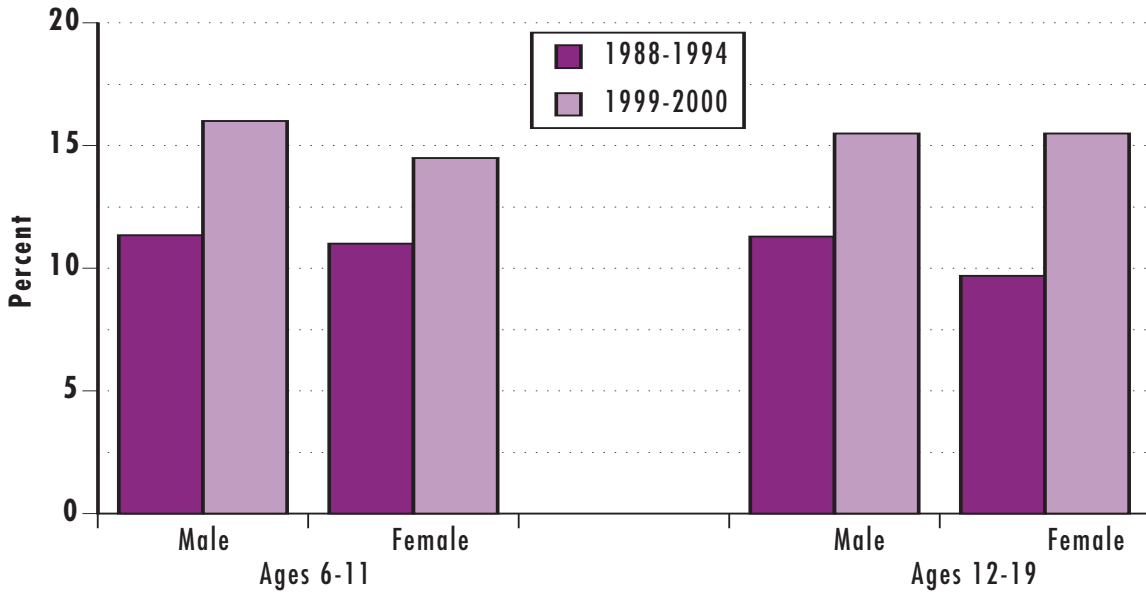
<sup>a</sup> Persons of Hispanic origin may be of any race. Data for Blacks and Whites include Hispanics of those races.

— Data not available.

Source: Bachman, J. G., Johnston, L. D., & O'Malley, P. M. (2003). *Monitoring the Future: Questionnaire Responses*. Ann Arbor, MI: Institute for Social Research, The University of Michigan.

Figure HC 2.5.A

Percentage of overweight children and youth, by age and sex: Selected years, 1988-2000

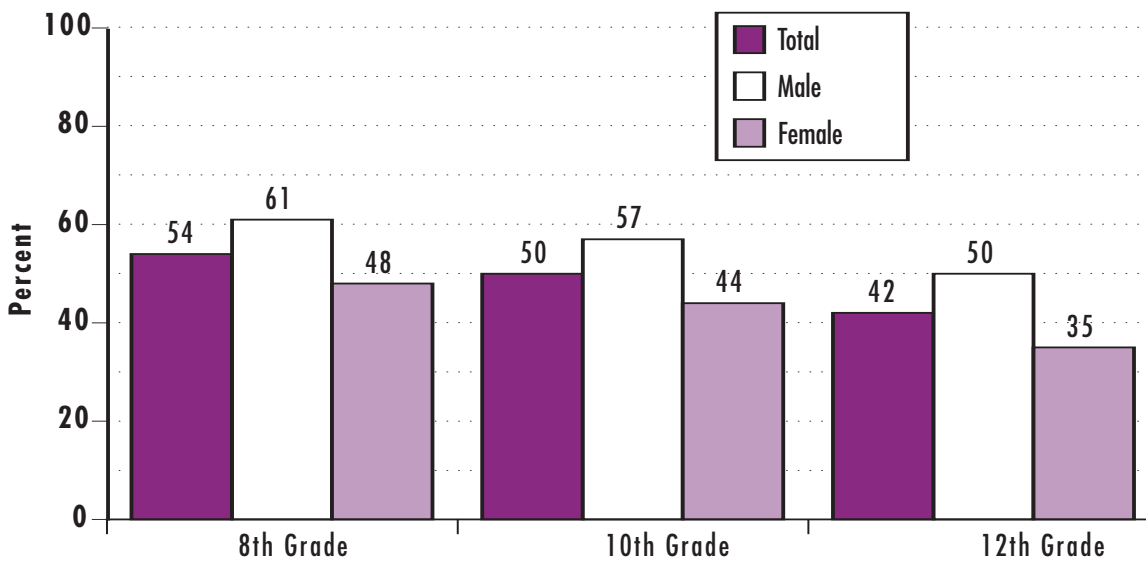


Note: Overweight is defined as BMI at or above the sex- and age-specific 95th percentile BMI cutoff points calculated at 6-month age intervals for children ages 6 to 11 (from the 1963-1965 NHES) and for youth ages 12 to 17 (from the 1966-70 NHES). Age is given at time of examination at mobile examination center. This definition differs from that reported in earlier versions of this report, which was based on children at or above the 85th percentile of BMI.

Source: U.S. Department of Health and Human Services, National Center for Health Statistics. (2003). *Health, United States, 2003, with Chartbook on Trends in the Health of Americans*. Hyattsville, MD: National Center for Health Statistics.

Figure HC 2.5.B

Percentage of 8th-, 10th-, and 12th-graders who report that they actively participate in sports or exercise "almost every day," by sex: 2002



Source: Bachman, J. G., Johnston, L. D., & O'Malley, P. M. (2003). *Monitoring the Future: Questionnaire Responses*. Ann Arbor, MI: Institute for Social Research, The University of Michigan.

SECTION 3. HEALTH CONDITIONS AND HEALTH CARE

**Table HC 2.5.C**

Percentage of youth in grades 9 to 12 who report having exercised vigorously three or more times in the seven days preceding the survey, by sex, grade, and race and Hispanic origin: Selected years, 1993-2001

	1993			1995			1997			1999			2001		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
<b>All youth</b>	66	75	56	64	74	52	64	72	54	65	72	57	65	73	57
<b>Grade</b>															
9th	75	81	68	72	80	62	73	79	66	73	77	68	72	77	67
10th	70	77	61	69	79	59	66	74	56	65	73	56	67	74	60
11th	63	71	53	60	72	47	60	69	49	58	67	49	61	72	51
12th	58	70	45	55	67	42	58	68	44	61	71	52	56	66	45
<b>Race and Hispanic origin<sup>a</sup></b>															
White, non-Hispanic	68	76	59	67	76	57	67	73	58	67	75	60	67	74	60
Black, non-Hispanic	60	71	49	53	68	41	54	67	41	56	65	47	60	72	48
Hispanic	59	69	50	57	70	45	60	69	50	61	72	50	61	69	52

<sup>a</sup> Persons of Hispanic origin may be of any race.

Note: Exercising vigorously involves activities that make students sweat and breathe hard for at least 20 minutes.

Sources: Centers for Disease Control and Prevention. (2002). Youth Risk Behavior Surveillance, United States, 2001. *Morbidity and Mortality Weekly Report*, 51(ss-4); Centers for Disease Control and Prevention. (2000). Youth Risk Behavior Surveillance, United States, 1999. *Morbidity and Mortality Weekly Report*, 49(ss-5); Centers for Disease Control and Prevention. (1998). Youth Risk Behavior Surveillance, United States, 1997. *Morbidity and Mortality Weekly Report*, 47(ss-3); Centers for Disease Control and Prevention. (1996). Youth Risk Behavior Surveillance, United States, 1995. *Morbidity and Mortality Weekly Report*, 45(ss-4); Centers for Disease Control and Prevention. (1995). Youth Risk Behavior Surveillance, United States, 1993. *Morbidity and Mortality Weekly Report*, 44(ss-1).

## HC 2.6 Activity Limitations

Activity limitations refer to long-term reductions in activities resulting from a chronic disease or impairment.<sup>1</sup> Through 1996 a person was classified as having an activity limitation if he or she reported (1) an inability to perform the major activity for a person in his or her age group, (2) being able to perform the major activity but being limited in the kind or amount of this activity, or (3) not being limited in the major activity but being limited in the kind or amount of other activities. For children under age 5, the major activity consisted of ordinary play. For children ages 5 to 17, the major activity was attending school. Activity limitation is now based on whether a child under age 5 was limited in usual kinds of play activities, whether a child under 18 years of age received special education or early intervention services, and whether a child ages 3 to 17 needed the help of other persons with personal care needs.

**Differences by Age.** Children ages 5 to 17 are more likely to experience an activity limitation due to a chronic condition than are younger children. In 2001, 3.3 percent of children under age 5 had an activity limitation due to a chronic condition, compared with 8.0 percent of older children. These differences by age can be seen across poverty status, sex, and race and Hispanic origin categories (Table HC 2.6).

**Differences by Sex.** Males have consistently accounted for a greater percentage of children with an activity limitation due to a chronic condition. In 2001, 8.7 percent of males under the age of 18, compared with 4.7 percent of females in the same age group, had activity limitations that were caused by a chronic condition (Table HC 2.6).

**Differences by Race and Hispanic Origin.** In 2000, 6.8 percent of Black, non-Hispanic children under the age of 18 had any activity limitation, compared with 6.3 percent of White, non-Hispanic and 4.4 percent of Hispanic children (Figure HC 2.6.A). Overall, the percentage of children under the age of 18 with an activity limitation due to a chronic condition has risen by a little more than one percent for both Black, non-Hispanics and White, non-Hispanics since 1985. The overall rate for Hispanics, however, has decreased over that time, from 5.1 to 4.4 percent (Table HC 2.6).

**Differences by Poverty Status.** Children under age 18 who were below the poverty line were much more likely to have an activity limitation than nonpoor children (Figure HC 2.6.B). In 2000, 8.4 percent of children below the poverty line and 6.1 percent of children at or above the poverty line had an activity limitation.

<sup>1</sup> A disease or impairment is classified as chronic if it has been apparent for at least 3 months or is a new condition that will ordinarily last for more than 3 months.

<sup>2</sup> Persons of Hispanic origin may be of any race.



**Table HC 2.6**

Percentage of children under age 18 with any activity limitation due to a chronic condition, by age, sex, poverty status, and race and Hispanic origin: Selected years, 1985-2001

	1985	1990	1995	1996	1997 <sup>a</sup>	1998	1999	2000	2001
<b>Children with activity limitations</b>	5.1	4.9	6.0	6.1	6.6	6.0	5.9	5.9	6.7
<b>Sex</b>									
Male	6.0	5.6	7.4	7.6	8.4	8.0	7.4	7.5	8.7
Female	4.2	4.2	4.6	4.6	4.7	3.9	4.4	4.3	4.7
<b>Race and Hispanic origin<sup>b</sup></b>									
White, non-Hispanic	5.1	5.0	6.0	5.9	7.1	6.2	6.3	6.3	7.0
Black, non-Hispanic	5.8	5.5	7.3	8.0	7.4	7.6	6.5	6.8	7.8
Hispanic	5.1	4.1	5.8	6.4	4.8	4.7	4.5	4.4	4.5
<b>Poverty status</b>									
Below poverty	7.3	6.3	8.6	9.4	8.8	9.0	8.8	8.4	—
At or above poverty	4.8	4.6	5.3	5.2	6.4	5.8	6.0	6.1	—
<b>Under age 5</b>	2.2	2.2	2.7	2.7	3.5	2.8	3.1	3.2	3.3
<b>Sex</b>									
Male	2.7	2.6	3.3	3.4	4.2	3.7	3.8	4.0	4.2
Female	1.6	1.7	2.0	1.8	2.7	1.8	2.4	2.4	2.4
<b>Race and Hispanic origin<sup>b</sup></b>									
White, non-Hispanic	1.8	2.1	2.7	2.0	3.7	2.6	3.0	3.1	3.2
Black, non-Hispanic	3.2	2.9	3.5	5.1	4.5	3.9	5.1	4.1	4.5
Hispanic	3.0	2.0	2.5	3.5	2.5	3.0	2.0	2.6	2.4
<b>Poverty status</b>									
Below poverty	2.9	2.9	3.6	5.5	4.6	4.0	4.5	3.7	5.2
At or above poverty	2.2	2.0	2.4	1.7	3.2	2.5	3.1	3.2	3.1
<b>Ages 5-17</b>	6.3	6.1	7.4	7.4	7.8	7.3	7.0	6.9	8.0
<b>Sex</b>									
Male	7.4	6.9	9.0	9.2	10.0	9.7	8.7	8.8	10.4
Female	5.3	5.2	5.6	5.6	5.5	4.8	5.1	5.0	5.5
<b>Race and Hispanic origin<sup>b</sup></b>									
White, non-Hispanic	6.4	6.2	7.2	7.3	8.3	7.5	7.4	7.4	8.5
Black, non-Hispanic	6.9	6.7	8.9	9.2	8.4	8.9	7.0	7.7	9.3
Hispanic	6.0	5.1	7.5	7.7	5.9	5.5	5.6	5.3	5.5
<b>Poverty status</b>									
Below poverty	9.2	7.9	11.0	11.2	10.8	11.1	10.6	10.7	12.0
At or above poverty	5.8	5.6	6.5	6.5	7.6	7.1	7.1	7.1	8.2

<sup>a</sup> In 1997, the National Health Interview Survey was redesigned. Data for 1997 onward are not comparable with earlier data. Data for 1997 and 1998 are for July-December only. There was an error in data collection in January-June 1998. For both years, data for only the second half of the year are presented so that data for 1997-98 will be comparable.

<sup>b</sup> Persons of Hispanic origin may be of any race.

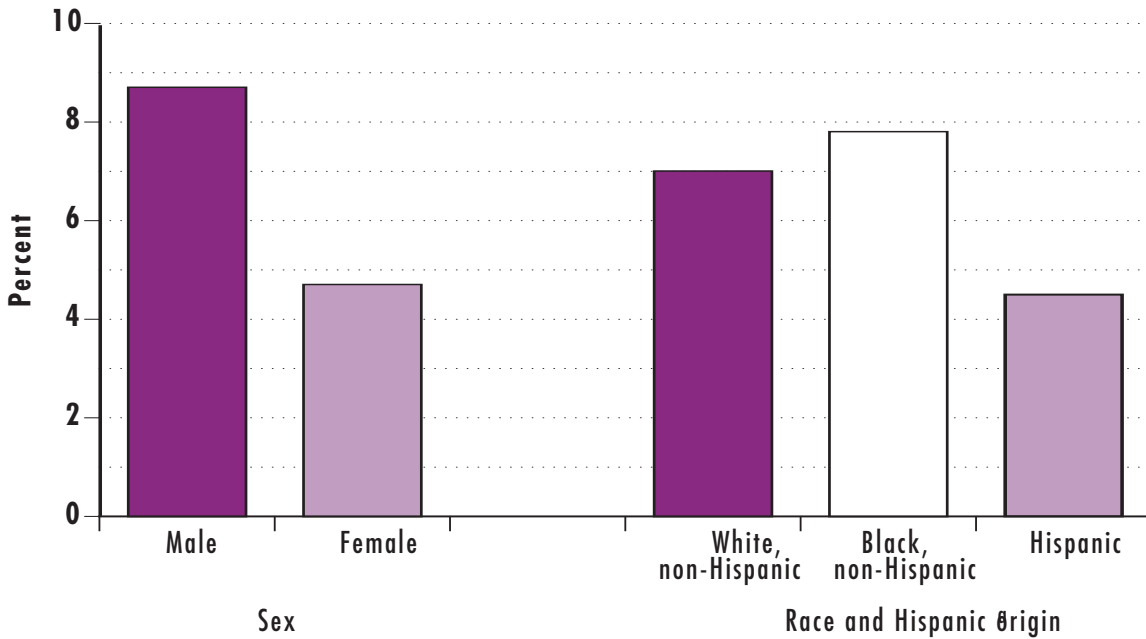
— Data not available.

Note: Persons are classified in terms of the major activity usually associated with their particular age group. Prior to 1997, the major activities for children included ordinary play for children under 5 years of age and attending school for those 5 to 17 years of age. Beginning in 1997, some new activities were included in the definition including receipt of special educational services, assistance with personal care, and cognitive problems. A person is classified as having an activity limitation if he or she is unable to perform the major activity, is able to perform the major activity but is limited in the kind or amount of this activity, or is not limited in the major activity but is limited in the kind or amount of other activities. A condition is considered chronic if the respondent indicates it was first noticed more than 3 months before the reference date of the interview, or it is a type of condition that ordinarily has a duration of more than 3 months.

Sources: Federal Interagency Forum on Child and Family Statistics. (2003). *America's Children: Key National Indicators of Well-Being, 2003*. Washington, DC: U.S. Government Printing Office; National Center for Health Statistics. (2003). Unpublished work; Benson, V. & Marano, M. A. (1998). Current Estimates from the National Health Interview Survey, 1995. *Vital Health Statistics*, 10.

**Figure HC 2.6.A**

Percentage of children under age 18 with any activity limitation due to a chronic condition, by sex, and by race and Hispanic origin: 2001



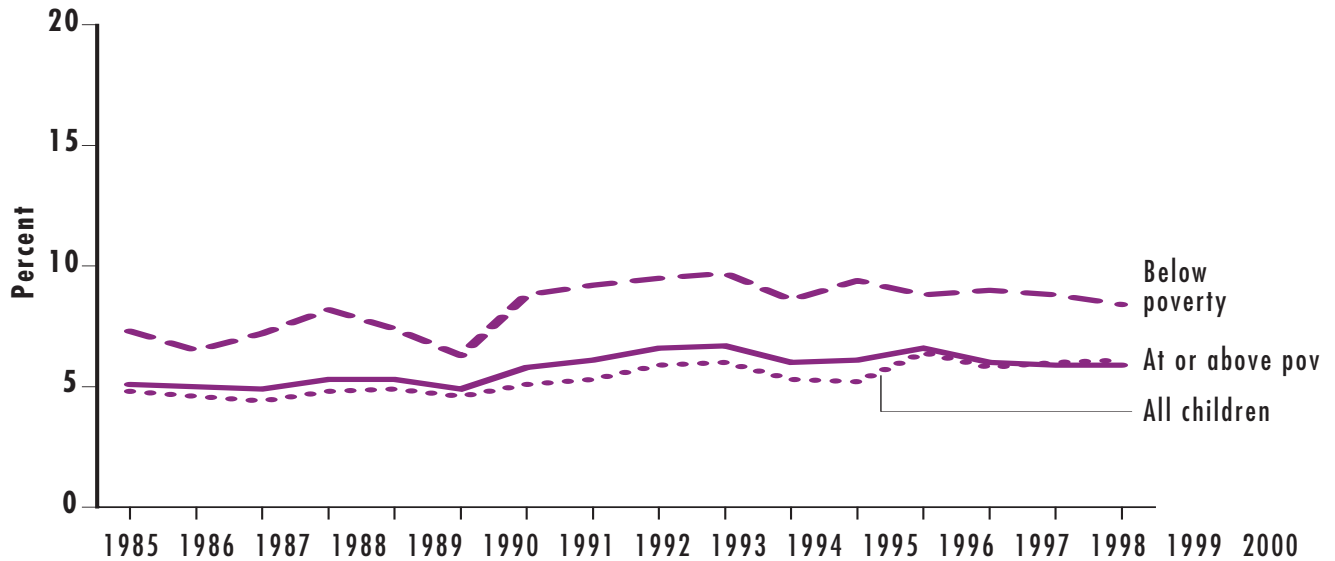
<sup>a</sup> Persons of Hispanic origin may be of any race.

Note: Persons are classified in terms of the major activity usually associated with their particular age group. Prior to 1997, the major activities for children included ordinary play for children under 5 years of age and attending school for those 5 to 17 years of age. Beginning in 1997, some new activities were included in the definition including receipt of special educational services, assistance with personal care, and cognitive problems. A person is classified as having an activity limitation if he or she is unable to perform the major activity, is able to perform the major activity but is limited in the kind or amount of this activity, or is not limited in the major activity but is limited in the kind or amount of other activities. A condition is considered chronic if the respondent indicates it was first noticed more than 3 months before the reference date of the interview, or it is a type of condition that ordinarily has a duration of more than 3 months.

Source: National Center for Health Statistics. (2003). Unpublished work.

**Figure HC 2.6.B**

Percentage of children under age 18 with any activity limitation due to a chronic condition, by poverty status: 1985-2000



Note: Persons are classified in terms of the major activity usually associated with their particular age group. Prior to 1997, the major activities for children included ordinary play for children under 5 years of age and attending school for those 5 to 17 years of age. Beginning in 1997, some new activities were included in the definition including receipt of special educational services, assistance with personal care, and cognitive problems. A person is classified as having an activity limitation if he or she is unable to perform the major activity, is able to perform the major activity but is limited in the kind or amount of this activity, or is not limited in the major activity but is limited in the kind or amount of other activities. A condition is considered chronic if the respondent indicates it was first noticed more than 3 months before the reference date of the interview, or it is a type of condition that ordinarily has a duration of more than 3 months. In 1997, the National Health Interview Survey was redesigned. Data for 1997-98 are not comparable with earlier data. Data for 1997 and 1998 are for July-December only. There was an error in data collection in January-June 1998. For both years, data for only the second half of the year are presented so that data for 1997-98 will be comparable.

Source: Federal Interagency Forum on Child and Family Statistics. (2002). *America's Children: Key National Indicators of Well-Being, 2002*. Washington, DC: U.S. Government Printing Office.

## HC 2.7 Children and Youth with HIV/AIDS

Through December 2001, 9,074 cases of AIDS among children younger than 13 and 4,428 cases among youth 13 to 19 years of age have been reported in the United States. Pediatric AIDS cases represent 1.1 percent and youth cases represent less than 1 percent of all the cumulative cases reported to the Centers for Disease Control and Prevention (CDC). The vast majority of children with AIDS (91 percent) contracted the disease from transmission of HIV before or during birth (perinatal transmission).

The steep decline in perinatally acquired AIDS (Figure HC 2.7.A) has been one of the dramatic changes of the 1990s. The number of perinatally acquired AIDS cases peaked in 1992 but have decreased by more than 75 percent in recent years. Research suggests that the implementation of guidelines for universal counseling, voluntary HIV testing of pregnant females, the use of zidovudine by pregnant females with AIDS, and administering zidovudine to infected newborns account for the decline. The rate of perinatal transmission is expected to continue to decline as a result of more aggressive courses of treatment and increased use of obstetric procedures, such as elective cesarean section, that reduce transmission.

Data from HIV infection case surveillance present a more current view of the HIV/AIDS epidemic than AIDS case surveillance data alone. Currently, 33 states, Guam, the Virgin Islands, and some Pacific Islands conduct confidential HIV infection surveillance of adults and youth. In 2001, these areas reported 4,557 cases of HIV infection in youth ages 13 to 24. The number of youth reported with HIV is greater than those reported with AIDS because of the long period between infection and development of disease. Young adults with AIDS probably became infected as adolescents but did not develop AIDS or get reported as having AIDS until they were adults. This underscores the importance of targeting HIV prevention messages to youth even though the total numbers of AIDS cases reported in this age group is relatively small.

**Differences by Sex.** In the 1980s and early 1990s, the vast majority of reported AIDS cases in adolescents were among males. However, the ratio of male to female cases has decreased over time. In 2001, 372 persons, 13 to 19 years old, were reported with AIDS—177 females and 195 males (Figure HC 2.7.B).

**Differences by Race and Hispanic Origin.**<sup>1</sup> Black, non-Hispanic and Hispanic children have been disproportionately affected by the HIV/AIDS epidemic. Although only 14 percent of the child population in the United States is Black, 65 percent of AIDS cases reported in 2001 among children under 13 were Black. Hispanics constitute 19 percent of the child population and 15 percent of reported childhood AIDS cases in 2001.<sup>2</sup> Because the majority of pediatric cases of AIDS are attributed to perinatal HIV transmission, these rates also reflect the disproportionate racial/ethnic distribution of HIV and AIDS among Black and Hispanic females.

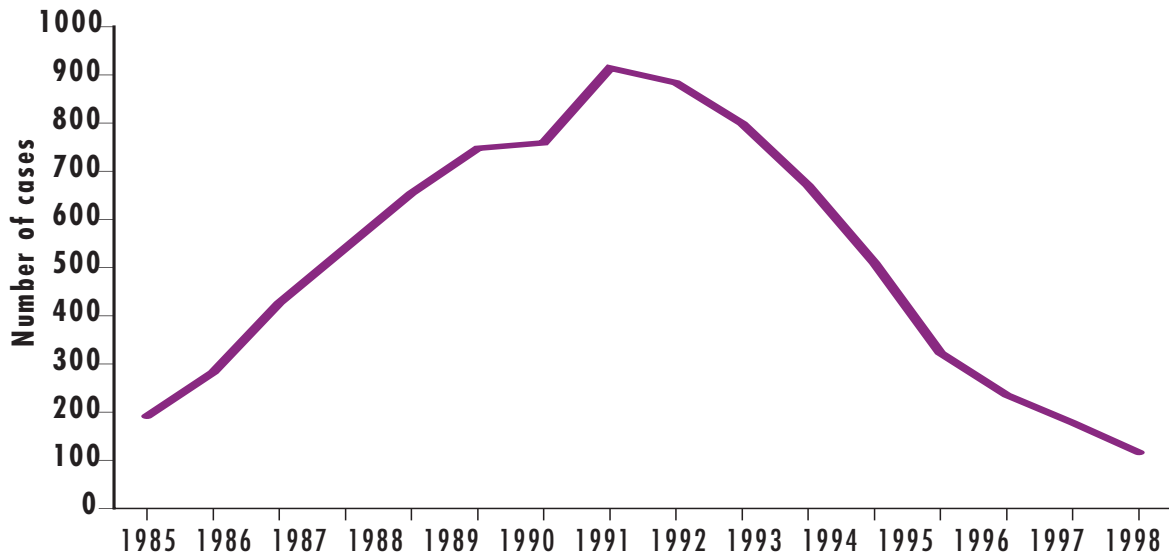
Black, non-Hispanic youth also have a higher number of deaths due to AIDS, than do White, non-Hispanic and Hispanic youth. For example, in 2000, there were 30 AIDS deaths among Black, non-Hispanic youth, 12 AIDS deaths among Hispanic youth, and 11 AIDS deaths among White, non-Hispanic youth (Table HC 2.7). While the number of deaths due to AIDS has decreased since the mid-1990s for all three groups, Black non-Hispanic youth continue to have the highest number of deaths due to AIDS (Figure HC 2.7.C).

<sup>1</sup> Persons of Hispanic origin may be of any race.

<sup>2</sup> Centers for Disease Control and Prevention. (2002). *Pediatric AIDS Surveillance, L262 slide series (through 2001)*. Atlanta, GA: U.S. Department of Health and Human Services.

Figure HC 2.7.A

Diagnosed perinatally acquired AIDS cases among children under age 13: 1985-2000

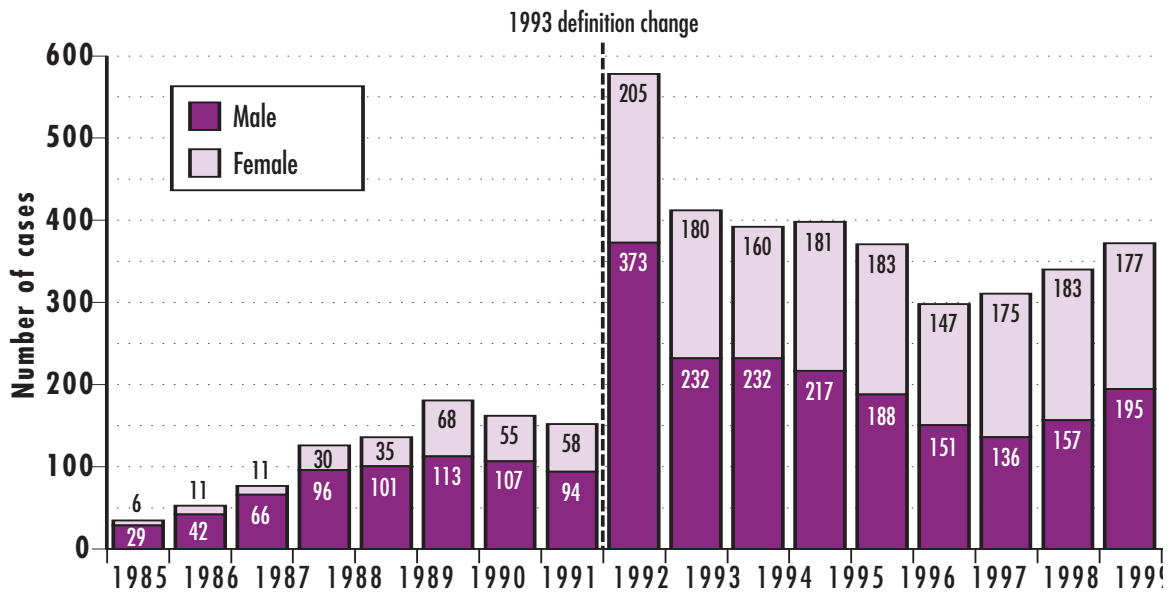


Note: Data are adjusted for reporting delays and unreported risk.

Source: Centers for Disease Control and Prevention. (2002). *Pediatric AIDS Surveillance, L262 slide series (through 2001)*. Atlanta, GA. U.S. Department of Health and Human Services.

Figure HC 2.7.B

AIDS cases in youth ages 13 to 19, by sex: 1985-2001



Source: Centers for Disease Control and Prevention. (2002). *HIV/AIDS Surveillance in Adolescents, L265 slide series (through 2001)*. Atlanta, GA. U.S. Department of Health and Human Services

**Table HC 2.7**

Number of AIDS deaths among youth under age 15, by sex and by race and Hispanic origin: 1987-2000

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>White, non-Hispanic</b>	70	70	90	63	85	81	96	95	93	64	32	12	12	11
Male	47	43	46	33	53	54	50	52	47	34	21	6	8	3
Female	23	27	44	30	32	27	46	43	46	30	11	6	4	8
<b>Black, non-Hispanic</b>	121	142	166	217	212	227	282	295	281	250	128	78	69	30
Male	59	70	80	108	108	122	141	135	143	133	71	30	41	16
Female	62	72	86	109	104	105	141	160	138	117	57	48	28	14
<b>Asian/Pacific Islander</b>	1	3	1	2	1	1	5	7	5	2	0	0	1	2
Male	1	2	0	1	0	1	2	3	2	0	0	0	0	1
Female	0	1	1	1	1	0	3	4	3	2	0	0	1	1
<b>American Indian/ Alaska Native</b>	2	0	1	2	4	0	3	3	2	1	0	0	0	0
Male	1	0	1	1	4	0	2	2	0	1	0	0	0	0
Female	1	0	0	1	0	0	1	1	2	0	0	0	0	0
<b>Hispanic<sup>a</sup></b>	69	68	91	92	85	94	120	129	117	87	40	19	25	12
Male	43	37	45	47	44	57	66	62	58	44	24	10	11	5
Female	26	31	46	45	41	37	54	67	59	43	16	9	14	7

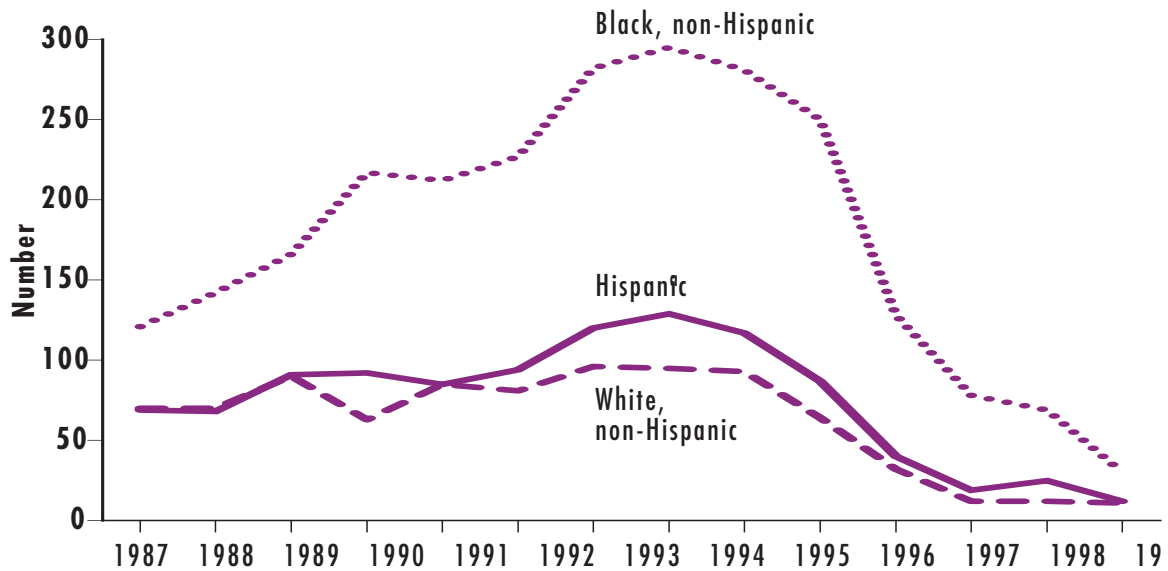
<sup>a</sup> Persons of Hispanic origin may be of any race.

Note: The number of AIDS deaths among youth in 2000 may increase as additional deaths are reported to the CDC.

Sources: Centers for Disease Control and Prevention. (2001). *HIV/AIDS Surveillance Report, 2001*; Centers for Disease Control and Prevention. (2000). *HIV/AIDS Surveillance Report, 2000*; Centers for Disease Control and Prevention. (1999). *HIV/AIDS Surveillance Report, 1999*; Centers for Disease Control and Prevention. (1998). *HIV/AIDS Surveillance Report, 1998*; Centers for Disease Control and Prevention. (1997). *HIV/AIDS Surveillance Report, 1997*; Centers for Disease Control and Prevention. (1996). *HIV/AIDS Surveillance Report, 1996*; Centers for Disease Control and Prevention. (1995). *HIV/AIDS Surveillance Report, 1995*; Centers for Disease Control and Prevention. (1994). *HIV/AIDS Surveillance Report, 1994*; Centers for Disease Control and Prevention. (1993). *HIV/AIDS Surveillance Report, 1993*; Centers for Disease Control and Prevention. (1992). *HIV/AIDS Surveillance Report, 1992*; Centers for Disease Control and Prevention. (1991). *HIV/AIDS Surveillance Report, 1991*; Centers for Disease Control and Prevention. (1990). *HIV/AIDS Surveillance Report, 1990*; Centers for Disease Control and Prevention. (1989). *HIV/AIDS Surveillance Report, 1989*.

Figure HC 2.7.C

Number of AIDS deaths among youth under age 15, by race and Hispanic origin: 1987-2000



<sup>a</sup> Persons of Hispanic origin may be of any race.

Note: The number of AIDS deaths among youth in 2000 may increase as additional deaths are reported to the CDC.

Sources: Centers for Disease Control and Prevention. (2001). *HIV/AIDS Surveillance Report, 2001*; Centers for Disease Control and Prevention. (2000). *HIV/AIDS Surveillance Report, 2000*; Centers for Disease Control and Prevention. (1999). *HIV/AIDS Surveillance Report, 1999*; Centers for Disease Control and Prevention. (1998). *HIV/AIDS Surveillance Report, 1998*; Centers for Disease Control and Prevention. (1997). *HIV/AIDS Surveillance Report, 1997*; Centers for Disease Control and Prevention. (1996). *HIV/AIDS Surveillance Report, 1996*; Centers for Disease Control and Prevention. (1995). *HIV/AIDS Surveillance Report, 1995*; Centers for Disease Control and Prevention. (1994). *HIV/AIDS Surveillance Report, 1994*; Centers for Disease Control and Prevention. (1993). *HIV/AIDS Surveillance Report, 1993*; Centers for Disease Control and Prevention. (1992). *HIV/AIDS Surveillance Report, 1992*; Centers for Disease Control and Prevention. (1991). *HIV/AIDS Surveillance Report, 1991*; Centers for Disease Control and Prevention. (1990). *HIV/AIDS Surveillance Report, 1990*; Centers for Disease Control and Prevention. (1989). *HIV/AIDS Surveillance Report, 1989*.

## HC 2.8 Sexually Transmitted Diseases

Sexually Transmitted Diseases (STDs) have potentially severe consequences. Syphilis facilitates the transmission of HIV, and gonorrhea infections are a major cause of pelvic inflammatory disease, which in turn may lead to infertility, ectopic pregnancy, or the birth of children with physical and mental developmental disabilities. Youth are at greater risk for the transmission of STDs because of their riskier sexual behavior, such as having multiple partners or engaging in unprotected sex. Female youth are at particularly high risk, as many STDs are more easily spread from male to female and often remain undetected and untreated in females.<sup>1</sup>

Gonorrhea rates have declined for all youth since 1975 (Table HC 2.8.A). Among youth ages 15 to 19, rates decreased by more than 60 percent from 1975 to 2001. Gonorrhea rates also decreased among youth ages 10 to 14, but the decline started in more recent years and has not been as dramatic as among older youth. However, females have had consistently higher reported rates of gonorrhea than males (Figure HC 2.8.A). In 2001, rates for females ages 15 to 19 were 703.2 per 100,000, versus 307.5 per 100,000 males of the same age (Table HC 2.8.A). Furthermore, Black, non-Hispanic youth have consistently had the highest reported rates of gonorrhea, frequently more than 8 times the rate of any other racial or ethnic group. Overall, rates for all races and Hispanics, except Asians and Pacific Islanders, have fallen since 1990.

Table HC 2.8.B shows that reported rates for primary and secondary syphilis have decreased for youth ages 10 to 14 and 15 to 19 since their peak in 1990. However, in general, females from both age groups have reported more cases of syphilis than their male counterparts (Figure HC 2.8.B). In 2001, females ages 15 to 19 had a rate of 2.5 cases per 100,000, nearly twice the male rate of 1.4 cases per 100,000. Furthermore, Black, non-Hispanic youth ages 15 to 19 have had rates of syphilis noticeably higher than all other racial and ethnic groups. Rates have been gradually falling for all racial, ethnic, and age groups except American Indians/Alaska Natives aged 15 to 19, whose reported syphilis rates have fluctuated considerably since 1990 (Table HC 2.8.B).

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<sup>1</sup> Centers for Disease Control and Prevention. (2002). *Pediatric AIDS Surveillance, L262 slide series (through 2001)*. Atlanta, GA. U.S. Department of Health and Human Services.



SECTION 3. HEALTH CONDITIONS AND HEALTH CARE

**Table HC 2.8.A**

Reported rates of youth gonorrhea by age, sex, and race and Hispanic origin (per 100,000 population): Selected years, 1975-2001

	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001
<b>Ages 10-14</b>	46.7	48.7	47.7	68.9	41.3	33.2	30.7	32.4	30.4	28.9	29.4
Sex											
Male	20.9	23.6	23.8	32.1	12.4	9.1	8.5	8.4	8.2	7.9	8.2
Female	73.6	74.8	72.9	107.5	71.7	58.6	54.1	57.5	53.8	50.9	51.7
Race and Hispanic origin <sup>a</sup>											
White, non-Hispanic	—	—	—	14.3	8.9	7.5	7.2	6.7	6.5	5.8	6.4
Black, non-Hispanic	—	—	—	386.8	237.0	179.8	162.2	173.7	159.5	147.9	147.8
Hispanic	—	—	—	15.3	19.3	15.8	15.0	12.9	13.4	13.2	13.9
Asian/Pacific Islander	—	—	—	4.5	5.6	3.3	3.5	3.3	4.6	5.1	7.0
American Indian/ Alaska Native	—	—	—	22.7	19.0	21.7	23.7	25.2	20.0	22.6	21.6
<b>Ages 15-19</b>	1,275.1	1,187.3	1,189.9	1,114.4	671.0	543.6	521.6	547.5	528.8	504.7	499.8
Sex											
Male	1,103.9	953.4	930.5	993.7	503.2	373.6	348.1	347.4	337.8	320.6	307.5
Female	1,446.4	1,424.6	1,455.1	1,241.6	847.8	724.5	706.2	759.4	730.8	699.3	703.2
Race and Hispanic origin <sup>a</sup>											
White, non-Hispanic	—	—	—	230.3	145.1	125.8	117.4	123.3	113.5	111.6	114.3
Black, non-Hispanic	—	—	—	6,316.2	3,815.3	2,904.8	2,780.0	2,909.7	2,833.8	2,692.7	2,635.3
Hispanic	—	—	—	268.7	270.3	222.7	223.5	216.6	228.7	216.8	223.7
Asian/Pacific Islander	—	—	—	70.0	81.0	64.1	68.6	64.8	73.5	81.8	93.2
American Indian/ Alaska Native	—	—	—	414.6	296.2	329.0	342.9	389.8	365.4	322.7	346.3

<sup>a</sup> Persons of Hispanic origin may be of any race.

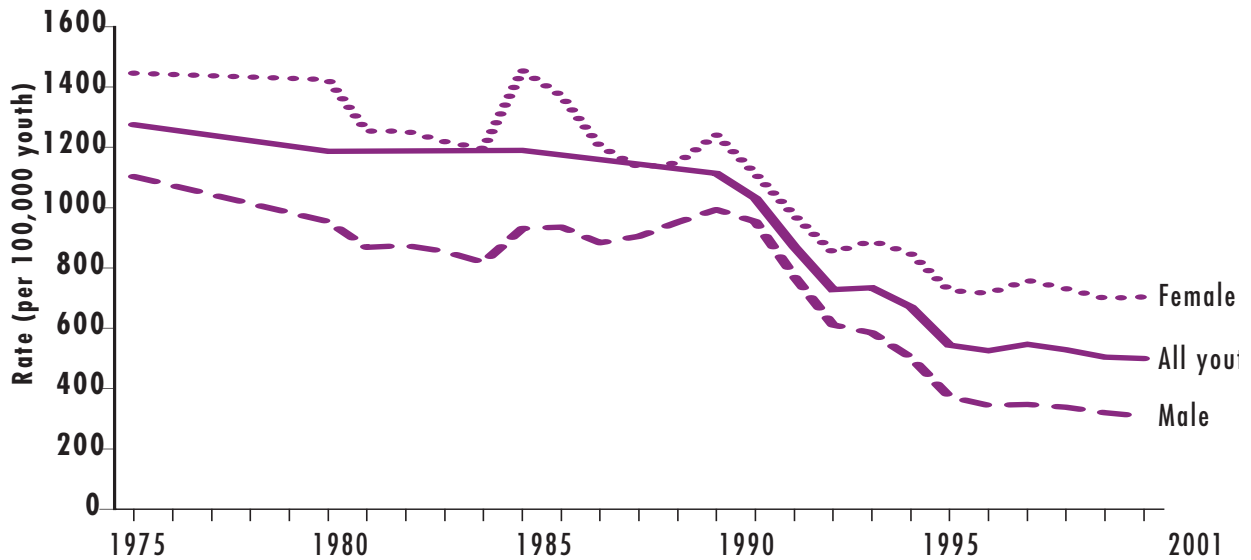
— Data not available.

Note: Although most reporting areas generally adhere to the case definitions for STDs used by the Public Health Service, there can be differences in case definitions as well as in the policies and systems for collecting surveillance data. In many areas, reporting for publicly supported institutions (e.g., STD clinics) was more complete than from other sources (e.g., private practitioners). For the following years, the states/areas listed did not report race/ethnicity for most cases: 1990 (Baltimore, New Jersey, New York City, New York State, and Kentucky); 1995 (Georgia, New Jersey, New York); and 1996 (New Jersey and New York); 1997 (Idaho, New Jersey, New York) and 1998 (Idaho and New Jersey). Massachusetts did not report age for most cases in 1990. Cases and population denominators have been excluded for these states/areas for the appropriate years.

Sources: Centers for Disease Control and Prevention, Division of STD Prevention. (2002). *Sexually Transmitted Disease Surveillance, 2001*. Atlanta, GA: U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1997). *Sexually Transmitted Disease Surveillance, 1996*. Atlanta, GA: U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1994). *Sexually Transmitted Disease Surveillance, 1993*. Atlanta, GA: U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1987). *STD Statistics*. U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1985). *STD Statistics*. U.S. Department of Health and Human Services.

Figure HC 2.8.A

Reported rates of gonorrhea for youth ages 15 to 19, by sex: 1975-2001



Note: Data exclude cases from Georgia, Idaho, and Indiana for 1983, from Maryland for 1982-1983, from Massachusetts for 1983, from New York for 1983-1984, and from Tennessee for 1984. Massachusetts did not report age for most cases in 1990. Although most reporting areas generally adhere to the case definitions for STDs used by the Public Health Service, there can be differences in case definitions as well as in the policies and systems for collecting surveillance data. In many areas, reporting from publicly supported institutions (e.g., STD clinics) was more complete than from other sources (e.g., private practitioners).

Sources: Centers for Disease Control and Prevention, Division of STD Prevention. (2002). *Sexually Transmitted Disease Surveillance, 2001*. Atlanta, GA: U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1997). *Sexually Transmitted Disease Surveillance, 1996*. Atlanta, GA: U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1994). *Sexually Transmitted Disease Surveillance, 1993*. Atlanta, GA: U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1987). *STD Statistics*. U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1985). *STD Statistics*. U.S. Department of Health and Human Services.

SECTION 3. HEALTH CONDITIONS AND HEALTH CARE

**Table HC 2.8.B**

Reported rates of youth primary and secondary syphilis by age, sex, and race and Hispanic origin (per 100,000 population): Selected years, 1975-2001

	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001
<b>Ages 10-14</b>	1.1	0.9	0.9	1.8	0.6	0.3	0.2	0.2	0.1	0.1	0.1
<b>Sex</b>											
Male	0.7	0.5	0.5	0.5	0.1	0.1	0.0	0.1	0.0	0.0	0.0
Female	1.5	1.3	1.4	3.2	1.0	0.5	0.4	0.4	0.2	0.2	0.2
<b>Race and Hispanic origin<sup>a</sup></b>											
White, non-Hispanic	—	—	—	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Black, non-Hispanic	—	—	—	10.6	3.5	1.6	1.3	1.2	0.7	0.6	0.5
Hispanic	—	—	—	1.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
Asian/Pacific Islander	—	—	—	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
American Indian/Alaska Native	—	—	—	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.0
<b>Ages 15-19</b>	17.8	17.2	17.0	29.8	10.1	6.1	4.1	3.1	2.7	2.3	1.9
<b>Sex</b>											
Male	18.0	19.2	16.3	20.9	6.6	4.1	2.6	1.9	1.8	1.6	1.4
Female	17.5	15.1	17.7	39.2	13.8	8.2	5.6	4.4	3.6	3.0	2.5
<b>Race and Hispanic origin<sup>a</sup></b>											
White, non-Hispanic	—	—	—	2.9	1.1	0.9	0.5	0.4	0.4	0.4	0.2
Black, non-Hispanic	—	—	—	174.6	60.9	35.1	23.0	17.5	14.6	12.4	9.9
Hispanic	—	—	—	15.2	2.4	1.7	2.1	1.6	1.6	1.3	1.8
Asian/Pacific Islander	—	—	—	1.7	0.5	0.8	0.4	0.4	0.1	0.1	0.3
American Indian/Alaska Native	—	—	—	2.8	4.2	1.1	0.5	3.7	4.2	2.0	2.1

<sup>a</sup> Persons of Hispanic origin may be of any race.

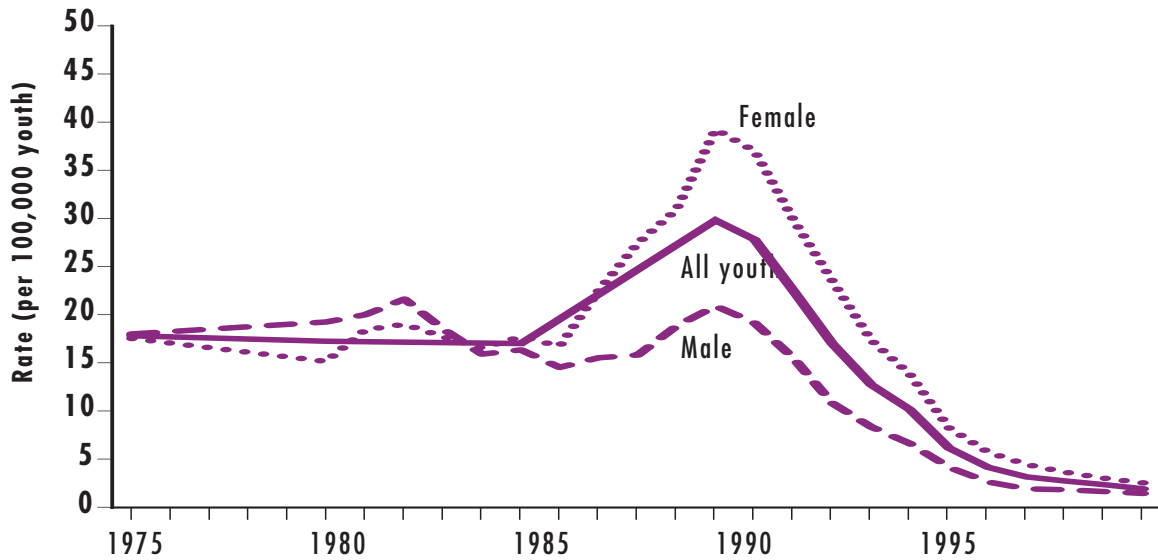
— Data not available.

Note: Although most reporting areas generally adhere to the case definitions for STDs used by the Public Health Service, there can be differences in case definitions as well as in the policies and systems for collecting surveillance data. In many areas, reporting from publicly supported institutions (e.g., STD clinics) was more complete than from other sources (e.g., private practitioners). For the indicated states/areas, cases and population denominators have been excluded for the years indicated: 1990 (Kentucky), 1996 (Rhode Island), 1997 (Idaho, New Jersey, New York), 1998 (Idaho, New Jersey), and 1999 (New Hampshire), because race/ethnicity was not reported for most cases.

Sources: Centers for Disease Control and Prevention, Division of STD Prevention. (2002). *Sexually Transmitted Disease Surveillance, 2001*. Atlanta, GA: U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1997). *Sexually Transmitted Disease Surveillance, 1996*. Atlanta, GA: U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1994). *Sexually Transmitted Disease Surveillance, 1993*. Atlanta, GA: U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1987). *STD Statistics*. U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1985). *STD Statistics*. U.S. Department of Health and Human Services.

Figure HC 2.8.B

Reported rates of primary and secondary syphilis for youth ages 15 to 19, by sex: 1975-2001



Note: Data exclude cases from New York for 1983-1984 and from Tennessee for 1984. Although most reporting areas generally adhere to the case definitions for STDs used by the Public Health Service, there can be differences in case definitions as well as in the policies and systems for collecting surveillance data. In many areas, reporting from publicly supported institutions (e.g., STD clinics) was more complete than from other sources (e.g., private practitioners).

Sources: Centers for Disease Control and Prevention, Division of STD Prevention. (2002). *Sexually Transmitted Disease Surveillance, 2001*. Atlanta, GA: U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1997). *Sexually Transmitted Disease Surveillance, 1996*. Atlanta, GA: U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1994). *Sexually Transmitted Disease Surveillance, 1993*. Atlanta, GA: U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1987). *STD Statistics*. U.S. Department of Health and Human Services; Centers for Disease Control and Prevention, Division of STD Prevention. (1985). *STD Statistics*. U.S. Department of Health and Human Services.

## SECTION 3. HEALTH CONDITIONS AND HEALTH CARE

## HC 2.9 Abuse and Neglect

Abuse and neglect cause physical and emotional harm to children. Studies have shown that abuse and neglect may negatively affect children's physical, cognitive, emotional, and social development, resulting in aggressiveness, anxiousness, the inability to control emotions, depression, and learning difficulties, among other problems.<sup>1</sup> Abuse and neglect also can produce short-term psychological consequences that range from poor peer relations to violent behavior, as well as untold long-term psychological and economic consequences when children reach adulthood.<sup>2</sup> In extreme cases, abuse and neglect may even result in death. It is estimated that in 2001, 1,300 children died from abuse or neglect.

In the early 1990s, the number of victims of maltreatment increased substantially. In the late-1990s, the numbers began to gradually decline (Table HC 2.9). In 2001, an estimated 903,000 children were victims of maltreatment. This figure represents approximately 12.4 out of every 1,000 children. Fifty-seven percent of all victims suffered neglect, while 19 percent suffered physical abuse; and 10 percent were sexually abused. Since 1990, neglect has been the most common form of maltreatment, and the percentage of children suffering from neglect has increased slightly since then (Figure HC 2.9). Some strong associations have been found between neglect and poverty, parental substance abuse, parental impulsivity, parental low self-esteem, and a lack of social support from the family.<sup>3</sup> The percentage of children suffering from physical and sexual abuse has decreased slightly since 1990, while the percentage of victims being psychologically abused has remained stable (Figure HC 2.9).

The number of victims shown in Table HC 2.9 may understate the actual number of victims of maltreatment. In order for a child to be included in these counts, a report must first be made to child welfare authorities, an investigation or assessment undertaken, and a determination made that maltreatment occurred or the child is at risk of maltreatment.

**Differences by Race and Hispanic origin.**<sup>4</sup> Black children, who account for about 15 percent of the child population, constituted 25 percent of all child abuse and neglect victims in 2001. Whites accounted for 50 percent of all victims and Hispanics 14 percent of all victims (Table HC 2.9).

**Differences by Age.** No age group accounts for an obviously disproportionate share of abuse and neglect victims. In 2001, infants age 1 and under accounted for 16 percent of all victims; children ages 2 to 5 accounted for 24 percent; children ages 6 to 9 accounted for 24 percent; children ages 10 to 13 accounted for 21 percent, and children ages 14 to 17 accounted for 15 percent (Table HC 2.9).

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<sup>1</sup> National Clearinghouse on Child Abuse and Neglect Information. (2001). *Understanding the Effects of Maltreatment on Early Brain Development*. Washington, DC: U.S. Department of Health and Human Services.

<sup>2</sup> Many studies have demonstrated a correlation between child abuse and neglect and serious adult problems, including violence, incarceration, and mental illness. However, these studies have not been able to separate the effects of child abuse and neglect from other factors that are correlated with it, including poverty, education, parenting skills, etc.

<sup>3</sup> Schumacher, J. A., Slep, A. M., & Heyman, R. E. (2001). *Acts of Omission: An Overview of Child Neglect*. Washington, DC: National Clearinghouse on Child Abuse and Neglect Information.

<sup>4</sup> Persons of Hispanic origin may be of any race. Estimates for Whites and Blacks include Hispanics of those races.

**Differences by Perpetrator.** Of the 804,386 perpetrators identified in 2001, 59 percent were female, and 41 percent were male. Nearly 85 percent of all victims were maltreated by at least one parent, with the most common pattern of maltreatment being a child victimized by a female parent acting alone. The most common type of maltreatment among parents was neglect (68.9 percent). While children are most likely to be physically abused by the unmarried partner of a parent (29.1 percent), nearly one-third of sexual abuse occurs between a victim and another relative.<sup>5</sup>

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<sup>5</sup> U.S. Department of Health and Human Services, Administration on Children, Youth and Families. (2003). *Child Maltreatment, 2001*. Washington, DC: U.S. Government Printing Office.

**Table HC 2.9**

Percent distribution of child maltreatment by type of maltreatment, sex, age of victim, and race and Hispanic origin: Selected years, 1990-2001

	1990	1992	1994	1996	1998	2000	2001
<b>Number of estimated victims<sup>a</sup></b>	860,000	998,000	1,031,000	1,015,000	908,000	883,000	903,000
<b>Type of substantiated maltreatment (percent)<sup>b</sup></b>							
Neglect	50	50	52	52	54	60	57
Physical Abuse	27	23	24	24	23	19	19
Sexual Abuse	18	14	14	12	12	10	10
Psychological or Emotional	7	5	5	6	6	8	7
Medical Neglect <sup>c</sup>	—	3	2	3	2	3	2
Other and Unknown	9	20	16	18	26	17	20
<b>Sex of victim</b>							
Male	45	45	42	41	48	48	48
Female	51	51	47	45	52	52	52
<b>Age of victim<sup>d</sup></b>							
Ages 0-1	13	13	12	11	14	15	16
Ages 2-5	24	25	24	22	25	24	24
Ages 6-9	22	23	21	22	25	25	24
Ages 10-13	19	19	17	17	20	20	21
Ages 14-17	15	15	13	13	15	15	15
Ages 18 and over	1	1	1	1	1	0	0
<b>Race and Hispanic origin of victim<sup>e</sup></b>							
White	53	50	48	43	47	51	50
Black	25	25	24	23	21	25	25
Hispanic origin	9	9	8	9	11	14	14
American Indian/Alaska Native	1	1	1	1	2	2	2
Asian/Pacific Islander	1	1	1	1	1	1	1
Multiple races <sup>f</sup>	—	—	—	—	—	1	1
Other races	1	1	1	2	2	—	—
Unknown race <sup>g</sup>	10	13	17	23	20	7	7

<sup>a</sup> For the 50 states and the District of Columbia. Victims are those children for whom the allegations of maltreatment was substantiated or indicated by the child welfare agency or who received an assessment that determined the children were victims. A victimization rate was generated based on the total number of reported victims and multiplied by the total child population of the reporting states. The number of reporting states on which these estimates are based varies from year to year. The victimization was then applied to the total child population in the United States to generate an national estimate.

<sup>b</sup> A child may be a victim of more than one maltreatment type. Therefore, the percentage total may add up to more than 100 percent.

<sup>c</sup> Medical neglect was not collected in 1990.

<sup>d</sup> Some states included persons ages 18 and older in their statistics on child abuse and neglect. Because those persons are considered victims of child maltreatment under the laws of their state, this table include these persons.

<sup>e</sup> Persons of Hispanic origin may be of any race. Estimates for Whites and Blacks include Hispanics of those races. For this reason (and because of rounding error) the Race and Hispanic origin percentages may add up to more than 100 percent.

<sup>f</sup> A child could not be identified as more than one race in the National Child Abuse and Neglect Database System data before 2000.

<sup>g</sup> In 2000 and 2001, "other" and "unknown" race were combined with "unable to determine."

— Data not available.

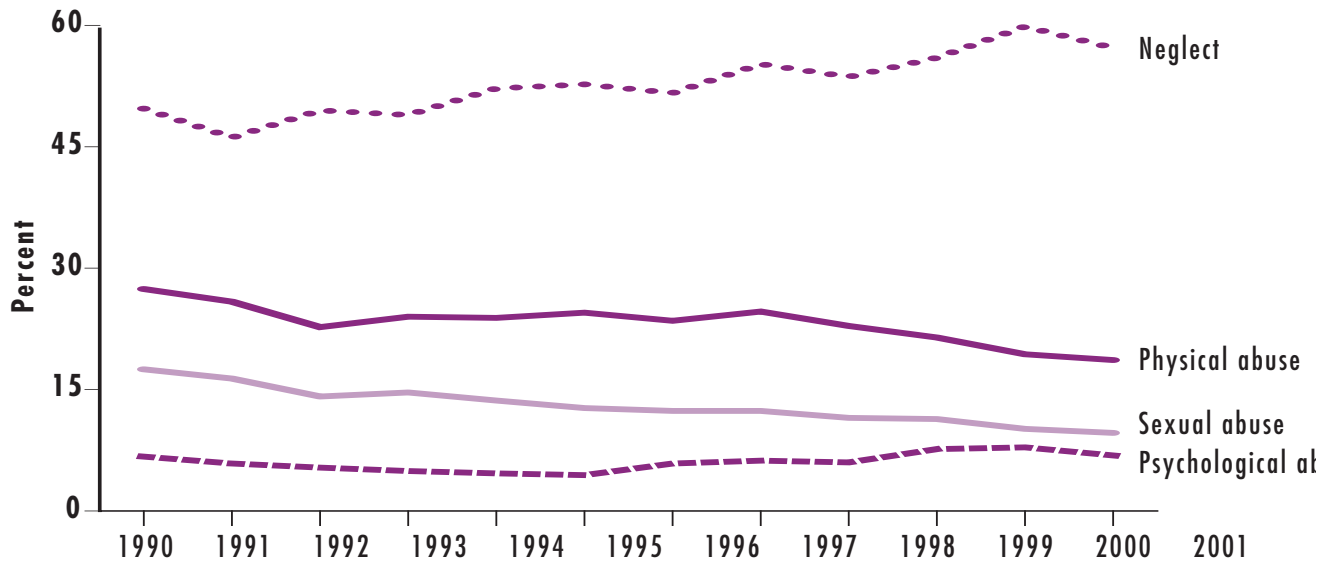
Note: Data in this table have been revised and therefore do not match data presented in previous issues of this report.

Source: U.S. Department of Health and Human Services, Administration on Children, Youth and Families. (2003). *Child Maltreatment, 2001*. Washington, DC: U.S. Government Printing Office.



Figure HC 2.9

Percentage of victims suffering from maltreatment, by type of maltreatment: 1990-2001



Note: The percentages total more than 100 percent of victims because children may have been victims of more than one type of maltreatment.

Source: U.S. Department of Health and Human Services, Administration on Children, Youth and Families. (2003). *Child Maltreatment, 2001*. Washington, DC: U.S. Government Printing Office.

## HC 2.10 Suicidal Youth

Suicide is one of the leading preventable causes of death in the United States. The most common factors that predispose youth to suicide are mental health problems, including mood and anxiety disorders, as well as substance abuse. Among females, the most important risk factors are major depression and a previous suicide attempt. Among males, the most significant risk factors are a previous suicide attempt, depression, disruptive behavior, and substance abuse.<sup>1</sup>

In 2001, 19 percent of youth in grades 9 to 12 report having seriously considered suicide during the previous 12 months (Table HC 2.10.A). During the same time period, 9 percent report having actually attempted suicide during the previous 12 months (Table HC 2.10.B). While the percentage of youth who have seriously considered suicide has decreased since 1993, the percentage of youth who have attempted suicide since 1993 has remained stable.

**Differences by Race and Hispanic Origin.**<sup>2</sup> In 2001, Black, non-Hispanic youth report the lowest rates of considering suicide at 13 percent. In comparison, 20 percent of White, non-Hispanic youth report having seriously considered suicide in the previous year (Table HC 2.10.A). Rates of reported attempted suicide range from 8 percent for White, non-Hispanics to 12 percent for Hispanic youth (Table HC 2.10.B).

**Differences by Sex.** In 2001, female youth were more likely than male youth to report having considered suicide (24 percent versus 14 percent) and having attempted suicide (11 percent versus 6 percent) during the previous year (Figure HC 2.10). However, the rate of actual suicides, particularly among youth ages 15 to 19, is considerably higher for males than for females, as discussed in Section HC 3.5.

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<sup>1</sup> U.S. Department of Health and Human Services. (1999). *Mental Health: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services.

<sup>2</sup> Persons of Hispanic origin may be of any race.

**Table HC 2.10.A**

Percentage of youth in grades 9 to 12 who report having seriously considered suicide in the previous 12 months, by sex, grade, and race and Hispanic origin: Selected years, 1993-2001

	1993	1995	1997	1999	2001
<b>All youth</b>	24	24	21	19	19
<b>Sex</b>					
Male	19	18	15	14	14
Female	30	30	27	25	24
<b>Grade</b>					
9th	24	26	22	18	21
10th	25	25	22	22	19
11th	25	26	21	18	19
12th	23	20	18	18	16
<b>Race and Hispanic origin<sup>a</sup></b>					
White, non-Hispanic	24	25	20	18	20
Black, non-Hispanic	20	20	16	15	13
Hispanic	26	25	23	20	19

<sup>a</sup> Persons of Hispanic origin may be of any race.

Sources: Centers for Disease Control and Prevention. (2002). Youth Risk Behavior Surveillance, United States, 2001. *Morbidity and Mortality Weekly Report*, 51(ss-4); Centers for Disease Control and Prevention. (2000). Youth Risk Behavior Surveillance, United States, 1999. *Morbidity and Mortality Weekly Report*, 49(ss-5); Centers for Disease Control and Prevention. (1998). Youth Risk Behavior Surveillance, United States, 1997. *Morbidity and Mortality Weekly Report*, 47(ss-3); Centers for Disease Control and Prevention. (1996). Youth Risk Behavior Surveillance, United States, 1995. *Morbidity and Mortality Weekly Report*, 45(ss-4); Centers for Disease Control and Prevention. (1995). Youth Risk Behavior Surveillance, United States, 1993. *Morbidity and Mortality Weekly Report*, 44(ss-1).

## Health Conditions

**Table HC 2.10.B**

Percentage of youth in grades 9 to 12 who report having attempted suicide in the previous 12 months, by sex, grade, and race and Hispanic origin: Selected years, 1993-2001

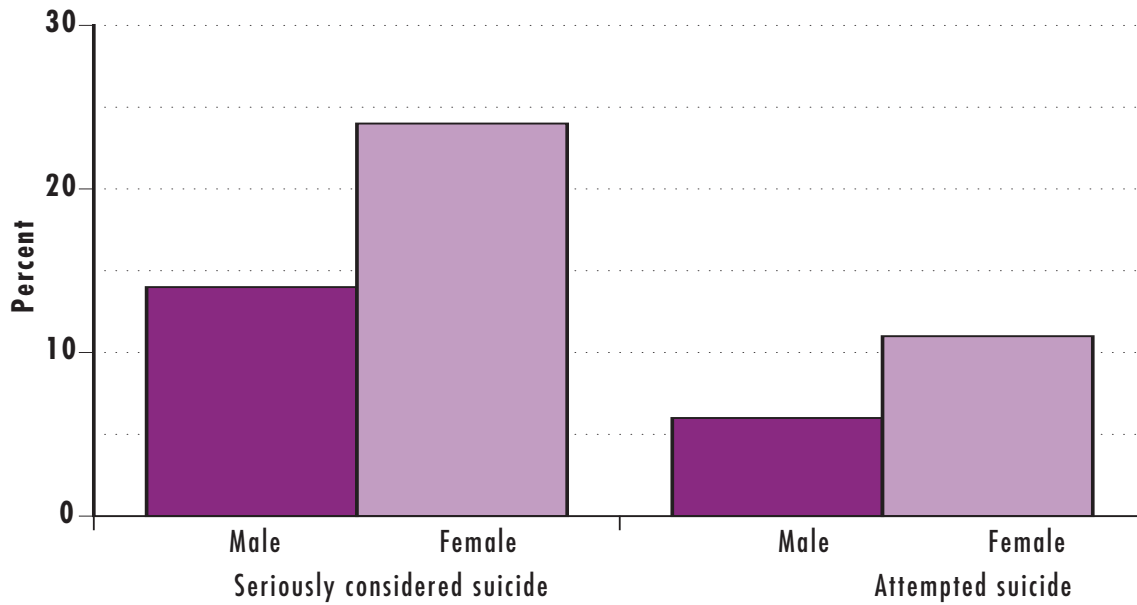
	1993	1995	1997	1999	2001
<b>All youth</b>	9	9	8	8	9
<b>Sex</b>					
Male	5	6	5	6	6
Female	13	12	12	11	11
<b>Grade</b>					
9th	10	11	11	10	11
10th	9	10	9	11	10
11th	8	9	8	6	8
12th	7	6	5	6	6
<b>Race and Hispanic origin<sup>a</sup></b>					
White, non-Hispanic	8	8	6	7	8
Black, non-Hispanic	8	10	7	7	9
Hispanic	14	13	11	13	12

<sup>a</sup> Persons of Hispanic origin may be of any race.

Sources: Centers for Disease Control and Prevention. (2002). Youth Risk Behavior Surveillance, United States, 2001. *Morbidity and Mortality Weekly Report*, 51(ss-4); Centers for Disease Control and Prevention. (2000). Youth Risk Behavior Surveillance, United States, 1999. *Morbidity and Mortality Weekly Report*, 49(ss-5); Centers for Disease Control and Prevention. (1998). Youth Risk Behavior Surveillance, United States, 1997. *Morbidity and Mortality Weekly Report*, 47(ss-3); Centers for Disease Control and Prevention. (1996). Youth Risk Behavior Surveillance, United States, 1995. *Morbidity and Mortality Weekly Report*, 45(ss-4); Centers for Disease Control and Prevention. (1995). Youth Risk Behavior Surveillance, United States, 1993. *Morbidity and Mortality Weekly Report*, 44(ss-1).

**Figure HC 2.10**

Percentage of youth in grades 9 to 12 who report having seriously considered suicide or attempted suicide in the previous 12 months, by sex: 2001



Source: Centers for Disease Control and Prevention. (2002). Youth Risk Behavior Surveillance, United States, 2001. *Morbidity and Mortality Weekly Report*, 51(ss-4).

## HC 2.11 Serious Violent Victimization of Youth

In addition to the direct physical harm suffered by young victims of serious violence, such violence can adversely affect their mental health and increase the likelihood that they will commit serious acts of violence in turn. Youth ages 12 to 17 are twice as likely as adults to be victims of serious violent crimes that include aggravated assaults, rape, robbery, and homicide. In order to track the incidence of these and other crimes, the Bureau of Justice Statistics has been administering the National Crime Victimization Survey on an annual basis since 1972.<sup>1</sup>

**Differences by Sex.** Male youth are considerably more likely than female youth to be victims of violent crimes. In 2000, 22.8 per 1,000 males ages 12 to 17 were victims of violent crimes, compared with 9.5 per 1,000 females (Table HC 2.11 and Figure HC 2.11). However, the rate of serious violent victimization of both male and female youth has decreased since 1980.

**Differences by Race.** Black youth have consistently been more likely than White youth to be victims of violent crimes. In 2000, 23.4 Black youths per 1,000 were victims of violent crime, compared with a rate of 15.4 per 1,000 White youth. In the past two decades, the rate of serious violent victimization of both Black and White youth has decreased dramatically (Table HC 2.11).

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<sup>1</sup> U.S. Department of Justice, Bureau of Justice Statistics. (2002). *National Crime Victimization Survey*. Washington, DC: U.S. Department of Justice, Federal Bureau of Investigation, Uniform Crime Reporting Program, Supplementary Homicide Reports.

**Table HC 2.11**

Rate of serious violent victimization of youth ages 12 to 17 (rates per 1,000), by age, race, and sex:  
Selected years, 1980-2000

	1980	1985	1990	1995	1996	1997	1998	1999	2000 <sup>a</sup>
<b>Age</b>									
Ages 12-17	37.6	34.3	43.2	28.3	30.3	27.1	24.6	20.4	16.3
Ages 12-14	33.4	28.1	41.2	26.7	24.9	23.5	20.4	20.4	13.7
Ages 15-17	41.4	40.3	45.2	30.0	35.8	30.7	28.6	20.5	19.0
<b>Race</b>									
White	34.1	34.4	37.0	25.5	27.7	27.6	24.2	18.7	15.4
Black	60.2	35.2	77.0	44.5	43.4	30.4	31.0	32.0	23.4
Other	21.7	28.8	37.3	23.7	31.2	9.7	11.7	13.2	7.6
<b>Sex</b>									
Male	54.8	49.8	60.5	39.0	40.4	33.1	32.2	26.8	22.8
Female	19.7	18.2	24.9	17.0	19.7	20.7	16.5	13.7	9.5

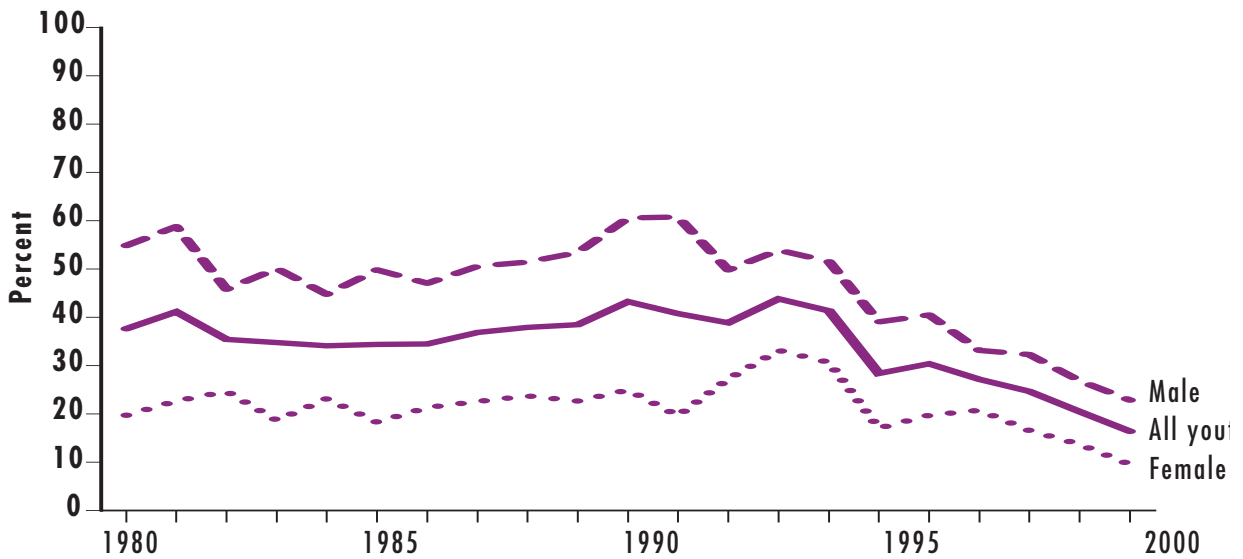
<sup>a</sup> The data for 2000 do not include final homicide estimates.

Note: Serious violent victimization is defined as being a victim of a violent crime, including aggravated assaults, rape, robbery, and homicide. Victimization rates were calculated using population estimates from the U.S. Census Bureau's, Current Population Reports. Such population estimates normally differ somewhat from population estimates derived from the victimization survey data. Because of changes made in the victimization survey, data prior to 1992 are adjusted to make them comparable with data collected under the redesigned methodology.

Source: U.S. Department of Justice, Bureau of Justice Statistics. (2002). *National Crime Victimization Survey*. Washington, DC: U.S. Department of Justice, Federal Bureau of Investigation, Uniform Crime Reporting Program, Supplementary Homicide Reports.

**Figure HC 2.11**

Rate of serious violent victimization of youth ages 12 to 17, by sex: 1980-2000



Note: Serious violent victimization is defined as being a victim of a violent crime, including aggravated assaults, rape, robbery, and homicide. Victimization rates were calculated using population estimates from the U.S. Census Bureau's Current Population Reports. Such population estimates normally differ somewhat from population estimates derived from the victimization survey data. Because of changes made in the victimization survey, data prior to 1992 are adjusted to make them comparable with data collected under the redesigned methodology.

Source: U.S. Department of Justice, Bureau of Justice Statistics. (2002). *National Crime Victimization Survey*. Washington, DC: U.S. Department of Justice, Federal Bureau of Investigation, Uniform Crime Reporting Program, Supplementary Homicide Reports.